STATE OF CALIFORNIA

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

In the Matter of: The Former Whittaker-Bermite Facility 22116 West Soledad Canyon Road Santa Clarita, California Respondent: Whittaker Corporation	Docket No. IS&E 02/03-009 IMMINENT AND SUBSTANTIAL ENDANGERMENT DETERMINATION AND ORDER AND REMEDIAL ACTION ORDER Health and Safety Code Sections 25355.5 (a) (1) (B), 25358.3(a), 58009, and 58010

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I. INTRODUCTION

1.1 Parties. The California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) issues this Imminent and Substantial Endangerment Determination and Order and Remedial Action Order (Order) to Whittaker Corporation (Respondent), a corporation organized under the laws of Delaware and doing business in California.

1.2 Site. This Order applies to the property located at 22116 West Soledad Canyon Road, in the City of Santa Clarita (formerly known as Saugus), County of Los Angeles, California 91350 (hereafter, the "Site"). The Site consists of approximately 996 acres and is identified by Assessor's Parcel numbers 2836-012-010, 2836-012-011, and 2836-012-012. A map showing the Site is attached as **Exhibit** 1. This Order applies to the Site and the areal extent of known or suspected contamination at or under the Site.

1.3 Status. Respondent is the previous owner and operator of the site and engaged in the management of hazardous waste at the Site pursuant to an Interim Status Document issued by the Department of Health Services (DHS), DTSC's predecessor agency, on September 9, 1981. On or about January 11, 1999, Respondent sold the Site to Santa Clarita, L.L.C. (SCLLC), which entered into an Enforceable Agreement with DTSC on or about February 14, 2001. SCLLC is the current owner and operator of the Site and Interim Status Hazardous Waste Facility. Nothing in this Order relieves SCLLC from any obligation or liability that it is subject to under Enforceable Agreement (Docket No. HSA-A 00/01-174) or any other provision of law. Respondent remains subject to Consent Order, HSA 94/95-012, with respect to the Site, effective on or about November 21, 1994.

1.4 Jurisdiction. This Order is issued by DTSC to Respondents pursuant to its authority under Health and Safety Code sections 25358.3(a), 25355.5(a)(1)(B), 58009 and 58010.

Health and Safety Code section 25358.3(a) authorizes DTSC to take various actions, including issuance of an Imminent or Substantial Endangerment Determination and Order, when DTSC determines that there may be an imminent or substantial endangerment to the public health or welfare or to the environment, because of a release or a threatened release of a hazardous substance.

Health and Safety Code section 25355.5(a)(1)(B) authorizes DTSC to issue an order establishing a schedule for removing or remedying a release of a hazardous substance at a site, or for correcting the conditions that threaten the release of a hazardous substance. The order may include, but is not limited to requiring specific dates by which the nature and extent of a release shall be determined and the site adequately characterized, a remedial action plan prepared and submitted to DTSC for approval, and a removal or remedial action completed.

Health and Safety Code section 58009 authorizes DTSC to commence and maintain all proper and necessary actions and proceedings to enforce its rules and regulations; to enjoin and abate nuisances related to matters within its jurisdiction which are dangerous to health; to compel the performance of any act specifically enjoined upon any person, officer, or board, by any law of this state relating to matters within its jurisdiction; and to protect and preserve the public health on matters within its jurisdiction.

Health and Safety Code section 58010 authorizes DTSC to abate public nuisances related to matters within its jurisdiction.

II. FINDINGS OF FACT

DTSC hereby finds:

2.1 Liability of Respondent. Respondent is a responsible party or liable person as defined in Health and Safety Code section 25323.5. From about 1942 to 1967, a portion of the Subject Site was owned or operated by Bermite Powder Company. In 1967, Respondent acquired Bermite Powder Company. From at least 1967 until it sold the subject Site to SCLLC on or about January 11, 1999, the facility was owned and/or operated by Respondent. Hazardous substances were disposed of at the Site during this period of ownership and operation.

2.2. Events Preceding This Order. As a part of a regulatory investigation and action conducted at the Site, SCLLC and DTSC entered into an Enforceable Agreement on February 14, 2001. By the terms of the February 14, 2001 Enforceable Agreement, SCLLC was obligated to undertake scheduled actions regarding the testing, investigation, and remediation of the Site under DTSC's supervision and to pay DTSC's oversight costs. On or about January 25, 2002, the Office of the Attorney General of the State of California notified SCLLC and Respondent that because SCLLC was out of compliance with the February 14, 2001 Enforceable Agreement, the State would institute litigation against SCLLC and Respondent to: recover past response costs incurred by DTSC that SCLLC had agreed to pay under the February 14, 2001 Enforceable Agreement, seek injunctive relief requiring SCLLC and Respondent to complete the testing, investigation and response actions required by the February 14, 2001 Enforceable Agreement; and seek declaratory relief that SCLLC and Respondent are liable for future response costs.

On May 13, 2002, the Office of the Attorney General again notified SCLLC and Respondent of DTSC's determination that SCLLC was in default of its obligations under the February 14, 2001 Enforceable Agreement, and that DTSC intended to pursue its legal remedies to address SCLLC's default.

2.3. Physical Description of Site. The Site consists of approximately 996 acres. The Site extends to Soledad Canyon Road to the north and to an industrial park to the west. Residential housing is located next to the southern and southwestern portions of the Site. The Placerita Oil Field and other industrial uses are located directly east of the Site. Previously, there were approximately 350 buildings scattered throughout the Site that were used for the manufacturing, storage and testing of explosives, and for administrative purposes. Few buildings remain on the Site. An approximately 10-acre area near the northern border of the Site along Soledad Canyon Road has been converted into a commuter rail station. A portion of the Site along the eastern boundary has been used for the construction of Golden Valley Road.

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2.4 Site History. Since 1934, the Site had been used to manufacture a variety of explosives, including dynamite, ammunition rounds, practice bombs, flares, signal cartridges, fireworks, igniters, detonators, fuses, boosters, gas generators, explosive bolts, tracer pellets, Spin rockets, Jato rockets, Sidewinder missiles, and oil field explosives, until the operations were ceased in 1987. A list of previous owners, provided by Respondent is included as **Exhibit 2**. Explosives were also tested on the Site in places such as: The Rocket Range, and the Firing Range. Off-specification items were detonated at the Detonation Range; burned in the burn cage, pan, rails, or in one of the burn pits; and/or buried on the Site in a landfill. During the shut down of operations, hazardous waste was manifested for off-site disposal. Materials, or mixture of materials, that were used in these activities include, but are not limited to: lead azide, red phosphorus, ammonium perchlorate, potassium perchlorate, polyvinyl acetate, cyclotrimethylene trinitramine (RDX), cyclotetramethylene tetranitramine (HMX), methyl ethyl ketone (MEK), hexane, lead, silver, barium, zinc, copper, chromium, and chlorinated solvents such as perchloroethylene (PCE) and trichloroethylene (TCE). A "Chemical and Waste Summary by Product Category, Whittaker-Bermite Facility" is included as **Exhibit 3**.

2.4.1 Hazardous Waste Management Units. Based upon its status as the owner and operator during the time hazardous waste operations were occurring, Respondent is subject to requirements applicable to facilities that have interim status pursuant to the California Hazardous Waste Control Law ("HWCL"), Health and Safety Code section 25100 et seq.

A modified version of the Closure Plan for the interim status hazardous waste management units was approved by the United States Environmental Protection Agency (U.S. EPA) and DHS on September 30, 1987, but modified again by the agencies on December 27, 1987 based on additional information provided by Respondent. The approved modified Closure Plan has been partially implemented at the Site. DTSC in the past acknowledged certification of closure by Respondent for thirteen out of the fourteen hazardous waste management units (HWMUs). DTSC may require that the closure of these units be re-opened if it is determined that releases have occurred or are

continuing from these units. Respondent shall complete closure of the one remaining HWMU, a former surface impoundment which currently contains soil contaminated with TCE. In addition, the perched groundwater beneath this HWMU may be contaminated with TCE. Closure shall be completed in accordance with Title 22, California Code of Regulations (Cal. Code Regs.), Chapter 15, Article 7 and the DTSC-approved Closure Plan.

Pending certification that closure and post-closure activities are complete, the Site will remain a facility under Interim Status.

2.4.2 Solid Waste Management Units. On September 18, 1987, a RCRA Facility Assessment ("RFA") report for the Site was prepared by AT Kearney for U.S. EPA. The purpose of the RFA was to identify Solid Waste Management Units (SWMUs) on the Site. Additional SWMUs were identified by Respondent in reports submitted to U.S. EPA in November 1987 and August 1988. In October 1988, Respondent submitted a report to DTSC with a list of SWMUs which identified most of the SWMUs previously identified to U.S. EPA and DTSC, along with additional units previously not reported. In 1992, DTSC executed a search warrant against Respondent which uncovered documents identifying additional SWMUs on the Site. All identified SWMUs are listed in **Exhibit 4** of this Agreement and are subject to investigation under this Order.

In October 1992, Respondent submitted a Preliminary Endangerment Assessment (PEA) to DTSC for a 10.3-acre parcel on the Site which contains four SWMUs. The PEA was conducted to determine if a commuter rail station could be developed on the 10.3 acre parcel. Based on the information provided, DTSC concurred with the PEA recommendation that no further action was necessary for the 10.3-acre parcel. However, investigation and further action is required as conditions in this area have been found to differ from those presented in the PEA report, namely, investigation has shown elevated levels of perchlorate and volatile organic compounds in the groundwater beneath this area of the Site.

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2.5 Hazardous Waste, Substances, and/or Constituents Found at the Site. In 1993, DTSC conducted a sampling investigation of selected portions of the Site. Soil samples were taken from trenches excavated in the Burn Valley portion of the Site and near the former Lead Azide HWMU. PCE was detected in one sample from the Burn Valley at 92,000 milligrams per kilogram (mg/kg). Other samples from the Burn Valley contained copper (up to 36,000 mg/kg), chromium (up to 550 mg/kg), barium (up to 1,300 mg/kg) and lead (up to 290 mg/kg). In the Lead Azide area, one sample was thirty two percent phosphorous and contained 190 mg/kg of copper.

TCE is present in the soil beneath a former surface impoundment and drum rinsing area near Building 317. A soil vapor extraction system has been installed to remove the TCE contamination from soil in the former Building 317 surface impoundment as described in the approved Closure Plan.

On May 9, 1994, DTSC inspected an area outside the Site boundaries and discovered debris that may have been generated by activities on the Site. The debris included a 5-gallon empty container with the words "Black Powder" imprinted on the lid, 55-gallon drums, empty powder casings, components of arming devices, solidified resin, and other miscellaneous debris. Some of the debris was scattered on the ground surface and some was buried in a stream bed.

In 1996, in an attempt to remove metallic debris from the Burn Valley so that a geophysical survey and sampling could be performed, Respondent uncovered soil contaminated with nitrate (100 to 400 mg/kg), phosphorous, heavy metals, TCE (110 mg/kg to 41,000 mg/kg), PCE (13 mg/kg to 25,000 mg/kg), semi-volatile organic compounds (SVOCs), dioxins/furans, HMX, RDX, and depleted uranium (DU).

In 1996, DU was encountered at the firing range and the northern portion of the adjacent Burn Valley area.

Investigations in 1997 and 1998 detected perchlorate in the soil and groundwater beneath the Site. From August 1997 through June 1998 an investigation of the old highway well located in Area 75 on the Site detected N-nitrosodimethylamine (NDMA), perchlorate, RDX, and HMX in the

groundwater beneath the Site. Groundwater samples contained concentration of NDMA (up to 67.75 µg/l), perchlorate (up to 370 µg/l), and HMX (up to 9.6 µg/l).

In mid-1997, perchlorate was detected in four local drinking water wells located outside the Site boundaries at levels at or slightly above the Department of Health Services ("DHS") provisional action level for perchlorate in drinking water of 18 micrograms per liter (μg/L) at that time. In April 1998, additional sampling detected perchlorate in the same wells: Santa Clarita Water Company's Saugus 1 and 2 wells at concentrations of 36 µg/L and 45 µg/L, respectively, in the Valencia Water Company's V-157 well at 9.6 µg/L (below the DHS provisional action level at that time), and in the Newhall County Water District's NC-11 well at 18 µg/L. Currently, the revised DHS provisional action level for perchlorate in drinking water is set at 4 ug/L. Further investigation is needed in order to define the perchlorate source area or areas and extent of perchlorate contamination in soils and groundwater.

On September 3, 1999, during an Ordnance and Explosive Waste (OE) Clearance Investigation of Operable Unit 1A, a 30 millimeter (MM) ammunition round was discovered. The 30 MM round had been fired, and was presumed to be a practice round that did not contain high explosives.

On September 17, 1999 during field mapping activities, DTSC identified DU in the vicinity of the East Fork Detonation Range, and multiple flare casings and several inert practice bombs in the vicinity of the East Fork Landfill.

Between March and July 2001, a Comprehensive Monitoring Evaluation ("CME") inspection was conducted by DTSC. In a report dated June 28, 2002, numerous violations of the RCRA monitoring requirements were noted which require immediate action to effectuate compliance.

2.6 Health Effects. Some of the hazardous wastes, substances, and/or constituents found at the Site are carcinogenic or toxic.

TCE is classified as a probable human carcinogen by the U.S. EPA (Group B). It is an eye irritant and can cause reproductive defects and tumorigenic effects, chloracne, and liver damage.

Acute, chronic exposure to TCE has been linked to an increase in irreparable damage to the liver and other organs.

PCE is a suspected human carcinogen, and a skin and eye irritant. Exposure to PCE can cause damage to the central nervous system and the liver.

Copper is toxic to humans and ecological receptors. High levels may sometimes cause death. Chronic exposure to copper dusts and fumes affects the upper respiratory system, causes eye and dermal irritation and increases the risk of Wilson's disease.

Chromium is classified as a human carcinogen by the U.S. EPA. Workers exposed to hexavalent chromium are susceptible to damage to respiratory and central nervous systems. Chromium poisoning can occur from ingestion and inhalation. The acute effects are irritation to the skin, respiratory passages, and gastrointestinal (GI) tract. Chromium poisoning can occur from ingestion, resulting in death.

Barium is toxic to humans and affects the central nervous system. Respiratory exposure can cause breathing to cease. Ingestion can cause death.

Lead is listed pursuant to California's Safe Drinking Water and Toxic Enforcement Act of 1986 ("Proposition 65") as a chemical known to the State to cause cancer. Lead poisoning can occur from inhalation and ingestion of lead in soil and dust. Lead has a number of toxic effects, including adversely affecting the central and peripheral nervous systems, blood forming tissues, kidneys and GI tract. Lead is a bioaccumulative substance. Increasing amounts build up in the body to a point where symptoms and disability occur. Lead is a developmental, female and male reproductive toxin. Of primary concern is delayed neurobehavioral development in children exposed to excessive levels of lead.

Zinc is an essential element, but can be toxic to humans and ecological receptors at higher concentrations which can also cause dermatitis and ulcerations of exposed skin. Inhalation affects the upper respiratory tract. Zinc can cause gastrointestinal effects when ingested in high concentrations.

Perchlorate interferes with the thyroid gland, and the ability of this gland to utilize iodine to produce thyroid hormones, which can result in hypothyroidism. No federal or state drinking water standard exists, because perchlorate, until recently, has not been known to be a common contaminant. Currently, the revised DHS provisional action level for perchlorate in drinking water is set at 4 ug/L. Benign tumors have been reported in the thyroids of laboratory animals treated with high dose exposures of potassium perchlorate in drinking water.

NDMA has been identified as a probable human carcinogen by the U.S. EPA. It is also identified as a chemical "known to the state [California] to cause cancer" under Proposition 65. NDMA is a hepatotoxin. NDMA is a methylating agent capable of causing carcinomas, especially of the liver and lungs, and to a lesser degree, the kidneys following chronic exposure.

RDX and HMX are chemically similar and therefore it is assumed that they have similar toxic and environmental effects. Clinical symptoms of poisoning develop within several hours after exposure to notable quantities (TLV=1.5 mg/m^3) when inhaled or ingested. Symptoms may include increased irritability, arm and leg muscle contractions, mental confusion, seizures and amnesia. Environmental concerns include toxic effects to all freshwater fish species tested at concentrations ranging from 3.6 to 6.4 µg/l.

OE and unexploded ordnance (UXO) could potentially be found at this site due to manufacturing activities, and the activities that occurred at both the East Fork Detonation Range, and the Firing Range. The improper handling, impact, or presence of OE/UXO could cause sudden death, blunt force trauma, or dismemberment. Additionally, smaller pieces of UXO shrapnel with explosive residue could cause injury or potential toxicity if improperly handled.

DU when inhaled or ingested as a soluble salt, has been shown to be a kidney toxicant. Clinical effects include initial body weight loss and kidney toxicity. Kidney damage includes interstitial nephritis and tubular regeneration.

2.7 Routes of Exposure. Based on the environmental fate of the hazardous wastes, substances, and/or constituents found at the Site, routes of human exposure include direct ingestion of contaminated water and/or soil, dermal exposure (direct skin contact), and on-site and off-site

inhalation of chemically contaminated particulates or volatile phase chemical contaminants that have been released and dispersed. Most of the identified contaminants have low solubility and preference for sorption onto particulates, except for perchlorate. Routes of exposure for particulates of depleted uranium can be through direct contact, ingestion, and/or inhalation. These contaminated particulates and particulates of depleted uranium may be released to the air during soil excavation and grading on the Site, and subsequently transported by the wind to receptors. The direct ingestion of contaminated soil on-site, and from run-off deposition and suspension off-site, is a potentially significant route of exposure, as children may ingest contaminated dirt by mouthing objects, although adults are less likely to be exposed by this route. Most metals are poorly absorbed through intact skin; dermal absorption is probably not a significant route of exposure relative to other potential routes. For UXO, the routes of human exposure are through direct dermal penetration, blunt force trauma, or dismemberment.

2.8 Public Health and/or Environmental Risk. The reasonably anticipated future use of the Site is for a mixed use commercial and residential housing development. The development of the Site, as currently planned, will require extensive grading of the present topography which could uncover previously buried hazardous substances, including OE/UXO, if necessary response action is not taken. Currently, the nearest residential areas are located adjacent to the Site boundary on the southern and southwestern portions of the Site.

The Burn Valley is located in a dry stream bed that originates on the Site and extends beyond the Site boundaries. Located up gradient from the Burn Valley is the East Fork Landfill. In March 1998, after a rainstorm, surface water runoff was collected and analyzed for chemicals known to be present at the Site. Of the twelve samples collected, eleven detected the presence of perchlorate ranging from 7 µg/l to 970 µg/l. DTSC has determined that people living in surrounding residential areas could potentially come in contact with hazardous substances deposited in or carried down stream beds beyond the boundaries of the Site through ingestion and/or inhalation.

The groundwater underlying the Site has been a source of drinking water. Migration of chemicals such as TCE, PCE, NDMA, and perchlorate to the groundwater creates a potential hazard

of exposure to humans from these hazardous substances through drinking water. Presently, the contaminated public water supply wells are not operating, and the one contaminated on-site water supply well is not used for consumption. The contamination migration pathways and extent of groundwater contamination needs to be investigated in order to define the source area or areas. Currently, groundwater monitoring activities are being performed as a requirement of the Closure Plan. Quarterly sampling events will continue until the surface impoundment HWMU is certified clean closed by DTSC.

III. CONCLUSIONS OF LAW

DTSC hereby concludes:

3.1 Respondent is a responsible party as defined by Health and Safety Code section 25323.5.

3.2 Each of the contaminants listed in Paragraph 2.4 is a "hazardous substance" as defined or listed in Health and Safety Code section 25316.

3.3 There has been a "release" and/or there is a threatened "release" of hazardous substances as defined in Health and Safety Code section 25320.

3.4 The actual and threatened release of hazardous substances at the Site may present an imminent and substantial endangerment to the public health or welfare or to the environment.

3.5 Response action is necessary to abate a public nuisance and to protect and preserve the public health.

IV. DETERMINATION

4.1 Based on the foregoing findings of fact and conclusions of law, DTSC hereby determines that response action is necessary at the Site because there has been a release and/or there is a threatened release of a hazardous substance.

4.2 Based on the foregoing findings of fact and conclusions of law, DTSC hereby determines that there may be an imminent and/or substantial endangerment to the public health or

welfare or to the environment because of the release and/or the threatened release of the hazardous substances at the Site.

V. ORDER

Based on the foregoing FINDINGS, CONCLUSIONS, AND DETERMINATION, IT IS HEREBY ORDERED THAT Respondent conduct the following response actions in the manner specified herein, and in accordance with a schedule specified by DTSC as follows:

5.1 Consistency with Laws and Regulations. All response actions taken pursuant to this Order shall be consistent with the requirements of Chapter 6.8 (commencing with section 25300), Division 20 of the Health and Safety Code, Chapter 6.5 (commencing with section 25100), Division 20 of the Health and Safety Code, and any other applicable state or federal statutes and regulations.

5.1.1 Site Remediation Strategy. The purpose of this Order is to require for the Site and for each of its operable units: implementation of any appropriate removal actions, completion of a Remedial Investigation/Feasibility Study (RI/FS), preparation of a Remedial Action Plan (RAP), preparation of California Environmental Quality Act (CEQA) documents, and Design and Implementation of the remedial actions approved in the RAP. An overall Site investigation and remediation strategy shall be developed by Respondent in conjunction with DTSC which reflects program goals, objectives, and requirements. Current knowledge of the Site contamination sources, exposure pathways, and receptors shall be used in developing this strategy.

An objective of the Site investigations shall be to identify immediate or potential risks to public health and the environment and prioritize and implement response actions using removal actions and operable units, as appropriate, based on the relative risks at the Site. Respondent and DTSC shall develop and possibly modify Site priorities throughout the course of the investigations. If necessary for the protection of public health and safety and the environment, DTSC will require additional response actions not specified in the Order to be performed as removal actions or separate operable units. Removal actions shall be implemented in accordance with a work plan and implementation schedule submitted by Respondent and approved by DTSC.

For operable unit response actions, DTSC will specify the separate and focused remedial phase activities to be conducted as RI/FS, RAP, Design, and Implementation. The focused activities shall be conducted in accordance with the corresponding remedial phase requirements specified in this Order.

5.1.2 Remedial Action Objectives. Based on available information, DTSC has preliminarily determined that the remedial action objectives for the Site include:

(a) Existing and potential beneficial uses of groundwater shall be protected. The Regional Water Quality Control Board Basin Plan identifies public water supplies as a beneficial use of groundwater in the Upper Santa Clara River Valley. Therefore, drinking water standards or more conservative values determined by Risk Assessment shall be remedial action objectives for this Site.

(b) The reasonably foreseeable future uses for portions of the Site include residential. Therefore, remedial action objectives for contaminated media in areas intended for residential use shall be developed which are protective of adults and children in a residential exposure scenario.

5.1.3 Removal Actions. Respondent shall undertake removal actions if, during the course of an RI or FS, DTSC determines that they are necessary to mitigate the release of hazardous waste, substances, and/or constituents at or emanating from the Site, or to address UXO or OE. DTSC may require Respondent to submit a removal action work plan that includes a schedule for implementing the work plan for DTSC's approval. Either DTSC or Respondent may identify the need for removal actions. In addition, Respondent shall implement the following removal actions. Work plans for implementing the following removal actions shall be submitted by the specified dates:

a. Fence and Post.

1) Within thirty (30) days of the effective date of this Order, Respondent shall maintain the existing fence surrounding the Site in accordance with the specifications attached as **Exhibit 5**. The fence shall secure, at a minimum, the areas specified on the Site map (**Exhibit** 1). Modifications to the fencing requirement due to the steep topographical relief that makes portions of the Site inaccessible must be approved in writing by DTSC.

2) Within thirty (30) days of the effective date of this Order, Respondent shall install adequate signs which are visible from the area surrounding the Site and posted at each route of entry into the Site, including those routes likely to be used by unauthorized persons. Such routes of entry include: access roads leading to the Site, and facing rivers, creeks, lakes or other waterways which may provide a route of access to the Site. The signs shall be in accordance with the specifications attached as **Exhibit 5**.

3) The fence and signs shall be constructed of materials able to withstand the elements and shall be continuously maintained for as long as DTSC determines necessary in order to protect public health and safety, and the environment.

5.1.4 Operable Units. Respondent shall characterize the lateral and vertical extent of vadose zone, groundwater, and surface water contaminant pathways beginning in proximity to known or suspected source areas of contamination within each individual Operable Unit set forth in this Section. Respondent may rely on existing studies and reports to the extent that DTSC determines it is appropriate. To the extent determined necessary by DTSC, based on a review of the pertinent closure records, Respondent shall also include in this characterization specific HWMUs for which DHS has already acknowledged certification of closure. Respondent shall conduct separate and focused RI/FS investigations that characterize soil or water and perched groundwater, if contaminated, and identify and assess the need for subsequent response actions for the following operable units (**Exhibit 6**) in accordance with the schedules contained within this Order:

(a) Operable Unit 1A (North Segment of Golden Valley Road). Operable Unit 1A includes the soils of the drainage area immediately north of the Solid Waste Management Unit No. 55, and includes the northern segment of the Golden Valley Road where it crosses the Site. No further action is contemplated for OU 1 A based on existing information.

(b) Operable Unit 1B. Operable Unit 1B includes the soils in the drainage area below and east of Solid Waste Management Unit No. 55 to the Site line. No further action is contemplated for OU 1 B, based on existing information.

(c) Operable Unit 1C. Operable Unit 1C includes the soil in the drainage area immediately south of Solid Waste Management Unit No. 55, and includes the southern segment of the Golden Valley Road where it crosses the Site. No further action is contemplated for OU 1 C based on existing information.

(d) Operable Unit 1D (Northeast and Oro Fino Canyon). Operable Unit 1D includes the soil in the Oro Fino Canyon drainage area (Drainage VII, Figure 1) and the northeast drainage area west of Operable Unit 1A (Drainage X and portion of XI, Figure 1). Remedial investigation conducted in this area identified elevated levels of lead, magnesium, and perchlorate that will require further characterization to delineate the nature and extent of contamination.

(e) Operable Unit 1E. Operable Unit 1E includes the soils and perched groundwater of Solid Waste Management Unit No. 55, as well as the soils of Solid Waste Management Unit Nos. 43 and 7, which is known to be contaminated with perchlorate and VOCs. An Interim Removal Action Work plan is needed to eliminate the threat to the environment.

(f) Operable Unit 2 (South Highlands). Operable Unit 2 includes the soil in the Southwest drainage area and South Central drainage area; Operable Unit 2 includes the 342 Impoundment, and Jato/Sidewinder, Spin Rocket, and Flare Production and Assembly Areas (Drainage VII and XII, Figure 1)

(g) Operable Unit 3 (Oakdale Canyon). Operable Unit 3 includes the soil in the Oakdale Canyon drainage area and the surrounding areas. Operable Unit 3 includes the East Fork Landfill and the East Fork Detonation Range. (Portion of Drainage IV and Drainage V, Figure 1).

(h) Operable Unit 4 (Northwest Ridge). Operable Unit 4 includes the soil in the Northwest Ridge and associated drainage area; Operable Unit 4 includes the Hula Bowls (Drainages I, II, III, and a portion of IV, Figure 1). The United States Army Corps of Engineers has begun work in Hula Bowl Landfill IV for the purposes of conducting a demonstration project for OE items.

(i) Operable Unit 5 (Entrance Valley and Eastern Drainage). Operable Unit 5 includes the soil in Entrance Valley and the Eastern drainage area (Drainages VIII and IX, Figure 1) including Parcel 1 identified in Exhibit 1.

(j) Operable Unit 6 (Former Surface Impoundment Area 317). Operable Unit 6 is located geographically within Operable Unit 2. Operable Unit 6 includes the surface impoundment at Former Building 317 and the resulting lateral and vertical extent of contamination in the vadose zone, inclusive of the operating soil vapor extraction system and groundwater monitoring wells in that area. Existing groundwater monitoring wells as well as any future groundwater monitoring wells associated with the surface impoundment shall be used to monitor the groundwater for compliance with Title 22 Cal. Code Regs., Chapter 15, Article 6 as long as the unit remains under Interim Status, and Title 22 Cal Code Regs., Chapter 14, Article 6 if a Post-Closure Permit is issued; however, site groundwater characterization and the need for any resulting remediation shall be evaluated as part of Operable Unit 7 addressed in section 5.1.4(k) of this Order. Soil vapor extraction shall continue until DTSC determines it is appropriate to terminate the soil vapor extraction. Perched groundwater, detected in vadose zone monitoring wells, shall be sampled and characterized.

(k) Operable Unit 7 (Groundwater and Surface Water). Operable Unit 7 includes the lateral and vertical extent of groundwater contamination in the quaternary alluvium, and the deep Saugus Formation groundwater contamination that have resulted from past activities associated with the Site. Operable Unit 7 also includes any surface water contamination, with the exception of highly contaminated drainage basins which will be included in the individual soil Operable Units (1 thru 6). Subsequent monitoring and any necessary remediation shall be conducted until DTSC determines it is appropriate to terminate monitoring and remediation. Perched groundwater shall be addressed as provided for in Section 5.1.7. The US Army Corps of Engineers is currently investigating the Site groundwater to study the perchlorate problem and seek long term solutions that will restore the groundwater resources to the area.

5.1.5 Groundwater Monitoring. Respondent shall continue groundwater monitoring in Operable Unit 6 in accordance with the Revised RCRA Closure Plan dated December 27, 1987 or any closure plan or groundwater monitoring plan that is subsequently approved by DTSC. Groundwater monitoring shall continue on a quarterly basis until the DTSC determines it is

appropriate to terminate monitoring. Within thirty days of the effective date of this Order Respondent shall cause the Site to come into compliance with the Schedule set out in DTSC's June 28, 2002 CME Report, Section 7, attached hereto as Exhibit 7.

Respondent shall monitor individual water-bearing zones within the Saugus Formation, as they are identified, to characterize contaminant pathways. This monitoring shall include designated monitoring wells in the Santa Clara River alluvium, and be in accordance with a DTSC- approved groundwater monitoring plan.

Respondent shall submit to DTSC an annual report of all the groundwater monitoring activities on and off the Site to be submitted by March 1 of every year. This report should, at a minimum, include graphs of all data as required in Title 22 C.C.R., Chapter 14, Article 6.

5.1.6 Surface Water (Storm water Runoff) Monitoring. Respondent shall continue monitoring of surface water runoff in accordance with a DTSC approved surface water runoff plan. Surface water runoff sampling shall be conducted during late stages of rainstorms commencing with the first significant rainstorm each year that generates surface water flow on the Site. Monitoring shall be conducted until DTSC determines it is appropriate to terminate the sampling.

5.1.7 Perched Water. Respondent shall identify contaminated perched water zones on the Site and, if DTSC determines it to be necessary, remediate such zones as Interim Remedial Measures in the individual soil operable units. Respondent shall characterize the lateral and vertical extent of contaminated perched water zones in conjunction with its activities related to Operable Unit 7, if DTSC determines that the zones impact or potentially impact Site-wide groundwater.

5.2 Remedial Investigation/Feasibility Study (RI/FS). A RI/FS shall be conducted for each Operable Unit at the Site. The RI/FS shall be prepared consistent with the U.S. EPA's "Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA," October 1988. In preparing the RI/FS, Respondent may rely on existing studies and reports to the extent that DTSC determines it is appropriate. The purpose of the RI/FS is to assess Site conditions and to evaluate alternatives to the extent necessary to select a remedy appropriate for each operable unit. RI and FS activities shall be conducted concurrently and iteratively so that the investigations

can be completed expeditiously. Because of the unknown nature of some of the conditions on the Site and the iterative nature of the RI/FS process, additional data requirements and analyses may be identified during the process. Respondent shall fulfill additional data and analysis needs identified by DTSC; these additional data and analysis requests will be consistent with the general scope and objectives of the Order.

The following elements of the RI/FS process and the Operable Units identified in Section 5.1.4 of this Order shall be preliminarily defined in the initial Site scoping and refined and modified, if necessary, as additional information is gathered throughout the RI/FS process.

(a) Conceptual Site Model identifying contamination sources, exposure pathways, and receptors;

(b) Federal, State and local remedial action objectives including applicable legal requirements or relevant and appropriate standards;

(c) Project phasing including the identification of removal actions;

(d) General response actions and associated remedial technology types; and

(e) The need for treatability studies.

5.2.1 RI/FS Objectives. The objectives of the RI/FS are to:

(a) Determine the nature and full extent of hazardous waste, substance, and/or constituent contamination of air, soil, surface water and groundwater at the Site;

(b) Identify all actual and potential exposure pathways and routes through environmental media;

(c) Determine the magnitude and probability of actual or potential harm to public health, safety or welfare and to the environment posed by the threatened or actual release of hazardous waste, substances, and/or constituents at or from the Site;

(d) Identify and evaluate appropriate response actions to prevent or minimize future releases at the Site and to mitigate any releases which have already occurred;

(e) Develop remedial action objectives for soil which are protective of adults and children in a residential exposure scenario in areas intended for residential use, as well as ecological receptors;

(f) Investigate for the presence of, and remove all OE/UXO, in accordance with a work plan approved by DTSC that is consistent with United States Department of Defense (DOD) Ammunition and Explosive Safety Standards, DOD 6055.9-STD, July 1999 (DOD Rule 6055.9) and DTSC guidance provided to the Respondent. DTSC may adopt its own guidance and policy for the investigation and removal of OE/UXO. All OE/UXO requiring storage and treatment shall be performed in accordance with the DTSC-approved OE RAW dated August 2002; and

(g) Collect and evaluate the information necessary to prepare a final remedial action plan (Final RAP) in accordance with the requirements of Health and Safety Code Section 25356.1.

5.2.2 RI/FS Work plan. Within thirty (30) days from the receipt of a request from DTSC, Respondent shall prepare and submit to DTSC for review and approval detailed RI/FS Work plans and implementation schedules which cover all activities necessary to conduct a complete RI/FS for the Operable Unit (OU) identified by DTSC, including any additional or modified OU which DTSC identifies, unless otherwise specified in the schedule in Section 6.24. The RI/FS Work plans shall include the areal extent of the contamination from the OU.

The RI/FS Work plans shall include a detailed description of the tasks to be performed, information or data needed for each task, and the deliverables which will be submitted to DTSC. The RI/FS Work plan for OU6 shall include closure and post-closure requirements. Either Respondent or DTSC may identify the need for additional work.

These RI/FS Work plan deliverables are discussed in the remainder of this Section, with a schedule for implementation, and monthly reports. The RI/FS Work plans shall include all of the following sections and address each component listed below.

(a) Project Management Plan. The Project Management Plan shall define relationships and responsibilities for major tasks and project management items among Respondent, its contractors, subcontractors, and consultants. The plan shall include an organization chart with the names and titles of key personnel and a description of their individual responsibilities.

(b) Scoping Document. The Scoping Document shall incorporate program goals, program management principles, and expectations contained in the National Contingency Plan (NCP) (40 Code of Federal Regulations (CFR) Part 300), as amended. It shall include:

(1) An analysis and summary of the background of each OU and the physical setting of the OU. At a minimum, the following information is required:

(A) A map of each OU, and if they exist, aerial photographs and blueprints showing buildings and structures;

(B) To the extent the information is known by or accessible to Respondent, a detailed description of past disposal practices and earthwork;

(C) A list of all hazardous waste, substances, and/or constituents which were disposed, discharged, spilled, treated, stored, transferred, transported, handled or used at each OU, and a description of their estimated volumes, concentrations, and characteristics;

(D) A description of the characteristics of the hazardous waste, substances, and/or constituents at each OU; and,

(E) If applicable, a description of all current and past manufacturing processes which are or were related to each hazardous waste, substance, and/or constituent that is on the list prepared pursuant to (b)(1)(C), above.

(2) An analysis and summary of previous response actions including a summary of all existing data including air, soil, surface water, and groundwater data and the Quality Assurance/Quality Control (QA/QC) procedures which were followed;

(3) Presentation of the Conceptual Site Model;

(4) The scope and objectives of RI/FS activities; and

(5) Preliminary identification of possible response actions and the data needed for the evaluation of alternatives. Removal actions shall be proposed if needed based on the initial evaluation of threats to public health and the environment. If remedial actions involving treatment can be identified, treatability studies shall be conducted during the characterization phase, unless Respondent and DTSC agree that such studies are unnecessary as set forth in Section 5.4;

(6) If applicable, initial presentation of the Remediation Strategy for each OU.

(c) Field Sampling Plan. The Field Sampling Plan shall include:

(1) Sampling objectives, including a brief description of data gaps and how the field sampling plan will address these gaps;

(2) Sample locations, including a map showing these locations, and proposed frequency;

(3) Sample designation or numbering system;

(4) Detailed specification of sampling equipment and procedures;

(5) Sample handling and analysis procedures including preservation methods, shipping requirements and holding times; and

(6) Management plan for wastes generated.

(d) Quality Assurance Project Plan. The plan shall include:

(1) Project organization and responsibilities with respect to sampling and analysis;

(2) Quality assurance objectives for measurement including accuracy, precision, and method detection limits. In selecting analytical methods, Respondent shall consider using detection limits that are at or below potentially applicable legal requirements or relevant and appropriate standards, such as Maximum Contaminant Levels or Maximum Contaminant Level Goals;

(3) Sampling procedures;

(4) Sample custody procedures and documentation;

(5) Field and laboratory calibration procedures;

(6) Analytical procedures;

(7) Laboratory to be used certified pursuant to Health and Safety Code Section 25198;

(8) Specific routine procedures used to assess data (precision, accuracy and completeness) and response actions;

(9) Reporting procedure for measurement of system performance and data quality;

(10) Data management, data reduction, validation and reporting procedures. Information shall be accessible to download onto DTSC's computer system; and

(11) Internal quality control procedures.

(e) Health and Safety Plan. A Site-specific Health and Safety Plan shall be prepared in accordance with federal (29 C.F.R. 1910.120) and state (Title 8 C.C.R. Section 5192) regulations and shall describe the following:

(1) Work tasks, objectives, and personnel requirements for field activities and a description of hazardous waste, substances, and/or constituents on the Site;

(2) Respondent's key personnel and their respective responsibilities;

(3) Potential hazards to workers including chemical hazards, physical hazards, confined spaces and climatic conditions;

(4) Potential risks arising from the work being performed including the impact to workers, the community and the environment;

(5) Exposure monitoring plan;

(6) Required personal protective equipment and engineering controls;

(7) Site access controls including work zones and security measures;

(8) Decontamination procedures;

(9) General safe work practices;

(10) Sanitation facilities;

(11) Standard operating procedures;

(12) Emergency response plan for workers addressing actual or potential hazardous material releases;

(13) Training requirements;

(14) Medical surveillance program; and

(15) Record keeping.

(f) Other Activities. A description of any other significant activities which are appropriate to complete the RI/FS shall be included.

(1) Respondent shall prepare and implement a Site-Wide UXO Avoidance and Downhole Clearance Work plan for all intrusive investigative sampling activities. This work plan shall be in accordance with the guidelines set forth in publications of the U.S. Army Engineering and Support Center, Huntsville Division, Ordnance and Explosive Center of Expertise - Generic Statement of Work (For UXO Avoidance), and Safety Concepts and Basic Considerations for Unexploded Explosive Ordnance Operations (February 16, 1996).

(2) Within sixty (60) days from the receipt of a request from DTSC, Respondent shall prepare an OE/UXO Clearance Remedial Investigation Work plan for the OU being investigated The work plan shall incorporate state of the art investigative techniques, be consistent with DOD Rule 6055.9 and DTSC guidance and policies, and shall be approved by DTSC prior to implementation. DTSC may adopt its own guidance and policies for the investigation and removal of OE/UXO.

(3) Respondent shall treat and store any OE and UXO items recovered during clearance activities, in accordance with a DTSC approved Removal Action Work plan.

(4) Respondent shall store any OE and UXO items recovered during clearance activities, in accordance with applicable Federal Bureau of Alcohol, Tobacco, and Firearms regulations for storage of high explosives, as well as other applicable regulations.

(g) Schedule. A schedule which provides specific time frames and dates for completion of each activity and report that will be conducted or submitted under the RI/FS Work plan including the schedules for removal actions and operable unit activities.

5.2.3 RI/FS Work plan Implementation. Respondent shall implement the approved RI/FS Work plans in accordance with the DTSC-approved schedule.

5.2.4 RI/FS Work plan Revisions. If Respondent proposes to modify any methods or initiates new activities for which no Field Sampling Plan, Health and Safety Plan, Quality Assurance Project Plan or other necessary procedures/plans have been established, Respondent shall prepare an addendum to the approved plan(s) for DTSC review and approval prior to modifying the method or initiating new activities.

5.3 Interim Screening and Evaluation of Remedial Technologies. At the request of DTSC, Respondent shall submit an interim document, which identifies and evaluates potentially suitable remedial technologies and recommendations for treatability studies.

5.4 Treatability Studies. If required by DTSC, treatability testing shall be performed by Respondent to develop data for the detailed remedial alternatives. Treatability testing is required to demonstrate the implementability and effectiveness of technologies, unless Respondent can show DTSC that similar data or documentation or information exists. The required deliverables are: a work plan, a sampling and analysis plan, and a treatability evaluation report. To the extent practicable, treatability studies will be proposed and implemented during the latter part of Site characterization.

5.5 Remedial Investigation (RI) Reports. The RI Reports shall be prepared and submitted by Respondent to DTSC for review and approval in accordance with the approved RI/FS Work plan schedule, and approved OE/UXO Clearance RI/FS schedule. The purpose of the RI is to collect data necessary to adequately characterize each OU for the purposes of defining risks to public health and the environment and developing and evaluating effective remedial alternatives. Each OU characterization may be conducted in one or more phases to focus sampling efforts and increase the efficiency of the investigation. Respondent shall identify the sources of contamination at each OU and define the nature, extent, and volume of the contamination. Using this information, the contaminant fate and transport shall be evaluated. The RI Report shall contain:

(a) OU Physical Characteristics. Data on the physical characteristics of each OU and surrounding area shall be collected to the extent necessary to define potential transport pathways and receptor populations and to provide sufficient engineering data for development and screening of remedial action alternatives.

(b) Sources of Contamination. Contamination sources (including heavily contaminated media) shall be defined. The data shall include the source locations, type of contaminant, waste characteristics, and Site features related to contaminant migration and human exposure.

(c) Nature and Extent of Contamination. Contaminants shall be identified and the horizontal and vertical extent of contamination, beginning in source areas, shall be defined in soil, groundwater, surface water, sediment, air, and biota. Spatial and temporal trends and the fate and transport of contamination shall be evaluated.

(d) Risk Assessments. The RI Report for each OU shall include a baseline health and ecological risk assessment for the OU.

5.6 Baseline Health and Ecological Risk Assessment. Respondent shall perform baseline health and ecological risk assessments for each OU that meet the requirements of Health and Safety Code Section 25356.1.5(b). Respondent shall submit a Baseline Health and Ecological Risk Assessment Report within thirty (30) days from the submittal of the RI Report The report shall be prepared consistent with U.S. EPA and DTSC guidance and regulations, including as a minimum: Risk Assessment Guidance for Superfund, Volume 1; Human Health Evaluation Manual, December 1989; Superfund Exposure Assessment Manual, April 1988; Risk Assessment Guidance for Superfund, Volume 2, Environmental Evaluation Manual, March 1989; and all other related or relevant policies, practices and guidelines of the California Environmental Protection Agency and policies, practices and guidelines developed by U.S. EPA pursuant to 40 CFR 300.400 et seq. The Baseline Health and Ecological Risk Assessment Report shall include the following components:

(a) Contaminant Identification. Characterization data shall identify contaminants of concern for the risk assessment process.

(b) Environmental Evaluation. An ecological assessment consisting of:

(1) Identification of sensitive environments and rare, threatened, or endangered species and their habitats; and

(2) As appropriate, ecological investigations to assess the actual or potential effects on the environment and/or develop remediation criteria.

(c) Exposure Assessment. The objectives of an exposure assessment are to identify actual or potential exposure pathways, to characterize the potentially exposed populations, and to determine the extent of the exposure. Exposed populations may include industrial workers, residents, and subgroups that comprise a meaningful portion of the general population, including, but not limited to, infants, children, pregnant women, the elderly, individuals with a history of serious illness, or other subpopulations, that are identifiable as being at greater risk of adverse health effects due to exposure to hazardous waste, substances, and/or constituents than the general population.

(d) Toxicity Assessment. Respondent shall evaluate the types of adverse health or environmental effects associated with individual and multiple chemical exposures; the relationship between magnitude of exposures and adverse effects; and related uncertainties such as the weight of evidence for a chemical's potential carcinogenicity in humans.

(e) Risk Characterization. Risk characterization shall include the potential risks of adverse health or environmental effects for each of the exposure scenarios derived in the exposure assessment.

5.7 Feasibility Study (FS) Reports. The FS Report for each OU shall be prepared and submitted by Respondent to DTSC for review and approval, no later than sixty (60) days after DTSC approval of the RI Report for the OU . The FS Report shall summarize the results of the FS for the applicable OU , including the following:

(a) Documentation of all treatability studies conducted.

(b) Development of medium-specific or OU-specific remedial action objectives, including legal requirements and other promulgated standards that are relevant.

(c) Identification and screening of treatment options for OE/UXO.

(d) Identification and screening of general response actions, remedial technologies, and process options on a medium and/or operable unit specific basis.

(e) Discussion of any required deed restrictions, or other institutional controls.

(f) Evaluation of alternatives based on the criteria contained in the NCP including:

Threshold Criteria:

(1) Overall protection of human health and the environment.

(2) Compliance with all applicable state, federal and local requirements.

Primary Balancing Criteria:

(1) Long-term effectiveness and permanence.

(2) Reduction of toxicity, mobility, or volume through treatment.

(3) Short-term effectiveness.

(4) Implementability based on technical and administrative feasibility.

(5) Cost.

Modifying Criteria:

(1) State and local agency acceptance.

(2) Community acceptance.

(g) Proposed remedial actions.

5.8 Public Participation Plan (Community Relations). Respondent shall work cooperatively with DTSC in providing an opportunity for meaningful public participation in response action decisions. Any such public participation activities shall be conducted in accordance with Health and Safety Code sections 25356.1 and 25358.7, as well as DTSC's most current Public Participation Policy and Guidance Manual, and shall be subject to DTSC's review and approval.

Respondent, in coordination with the DTSC, shall conduct a baseline community survey and develop a Public Participation Plan (PPP) which describes how, under the Order, the public and

adjoining community will be kept informed of activities conducted at the Site and how Respondent will be responding to inquiries from concerned citizens. Major steps in developing a PPP are as follows:

(a) Develop proposed list of interviewees;

(b) Schedule and conduct community interviews; and

(c) Analyze interview notes, and develop objectives.

Respondent shall conduct the baseline community survey and submit the PPP for DTSC's review within forty (40) days of the effective date of this Order.

Respondent shall implement any of the public participation support activities identified in the PPP, at the request of DTSC. DTSC retains the right to implement any of these activities independently. These activities include, but are not limited to, development and distribution of fact sheets; public meeting preparations; and development and placement of public notices.

5.9 California Environmental Quality Act (CEQA). DTSC must comply with CEQA insofar as activities required by this Order are projects requiring CEQA compliance. Upon DTSC request, Respondent shall submit any information deemed necessary by DTSC to facilitate compliance with CEQA. The costs incurred by DTSC in complying with CEQA are response costs and Respondent shall reimburse DTSC for such costs pursuant to Section 6.18.

5.10 Remedial Action Plans (RAPs). No later than thirty (30) days after DTSC approval of an FS Report, Respondent shall prepare and submit to DTSC a draft RAP for the applicable OU. Each draft RAP shall be consistent with the NCP and Health and Safety Code section 25356.1. The draft RAP public review process may be combined with that of any other documents required by CEQA. Each draft RAP shall be based on and summarize the approved RI/FS Report for the OU, and shall clearly set forth:

(a) Health and safety risks posed by the conditions at the OU.

(b) The effect of contamination or pollution levels upon present, future, and probable beneficial uses of contaminated, polluted, or threatened resources.

(c) The effect of alternative remedial action measures on the reasonable availability of groundwater resources for present, future, and probable beneficial uses.

(d) OU-specific characteristics, including the potential for off-site migration of hazardous waste, substances, and/or constituents, the surface or subsurface soil, the hydrogeologic conditions including perched groundwater, as well as preexisting background contamination levels.

(e) Cost-effectiveness of alternative remedial action measures. Land disposal shall not be deemed the most cost-effective measure merely on the basis of lower short-term cost.

(f) The potential environmental impacts of alternative remedial action measures, including, but not limited to, land disposal of the untreated hazardous waste, substances, and/or constituents as opposed to treatment of the hazardous waste substances, and/or constituents to remove or reduce its volume, toxicity, or mobility prior to disposal.

(g) A statement of reasons setting forth the basis for the removal and remedial actions selected. The statement shall include an evaluation of each proposed alternative submitted and evaluate the consistency of the removal and remedial actions proposed by the plan with the NCP and factors specified in subdivision (d) of Health and Safety Code section 25356.1, if these factors are not otherwise adequately addressed through compliance with the NCP.

(h) A schedule for implementation of all proposed removal and remedial actions.

(i) The implementation activities conducted pursuant to the OE/UXO RAW as approved by DTSC under Section 5.1.3 of this Order.

In conjunction with DTSC, Respondent shall implement the public review process specified in DTSC's Public Participation Policy and Guidance Manual. Within ten (10) days of closure of the public comment period, Respondent shall submit a written Responsiveness Summary of all written and oral comments presented and received during the public comment period.

Following DTSC's review and finalization of the Responsiveness Summary, DTSC will specify any changes to be made in the RAP. The Respondent shall modify the document in accordance with DTSC's specifications and submit a final RAP within fifteen (15) days of receipt of DTSC's comments.

5.11 Remedial Designs [RDs]. Within sixty (60) days after DTSC approval of a final RAP, Respondent shall submit to DTSC for review and approval an RD for the applicable OU describing in detail the technical and operational plans for implementation of the final RAP which includes the following elements, as applicable:

(a) Design criteria, process unit and pipe sizing calculations, process diagrams, and final plans and specifications for facilities to be constructed.

(b) Description of equipment to be used to excavate, handle, and transport contaminated material.

(c) A field sampling and laboratory analysis plan addressing sampling during implementation and to confirm achievement of the performance objectives of the RAP.

(d) A transportation plan identifying routes of travel and final destination of wastes generated and disposed, and including approvals from California Department of Transportation, California Highway Patrol and any other local, state, or federal agency.

(e) For groundwater extraction systems: aquifer test results, capture zone calculations, specifications for extraction and performance monitoring wells, and a plan to demonstrate that capture is achieved.

(f) An updated health and safety plan addressing the implementation activities.

(g) Identification of any necessary permits and orders.

(h) An operation and maintenance plan including any required monitoring.

(i) A detailed schedule for implementation of the remedial action consistent with the schedule contained in the approved RAP including procurement, mobilization, construction phasing, sampling, facility startup, and testing.

5.12 Deed Restrictions. If the approved remedy in a final RAP includes deed restrictions or other institutional controls, Respondent shall sign and record deed restrictions or implement other institutional controls approved by DTSC within ninety (90) days of DTSC's approval of the final RAP.

5.13 Implementation of Final RAPs. Upon DTSC approval of a Remedial Design (RD), Respondent shall implement the final RAP for the applicable OU in accordance with the approved schedule in the RD. Within thirty (30) days of completion of field activities, Respondent shall submit an Implementation Report documenting the implementation of each Final RAP and RD.

5.14 Operation and Maintenance (O&M). Respondent shall comply with all O&M requirements in accordance with a final RAP and approved RD. Within thirty (30) days of the date of DTSC's request, Respondent shall prepare and submit to DTSC for approval an O&M work plan that includes an implementation schedule. Respondent shall implement the work plan in accordance with the approved schedule.

5.15 Remedy Review. Respondent shall review and reevaluate OE remedial actions approved by DTSC for the Site after a period of one (1) year and every year thereafter for five (5) years. After completing annual reviews for the first five (5) years, Respondent shall review and reevaluate OE remedial actions every three (3) years thereafter. In addition, the Respondent shall review and reevaluate all remedial actions, after a period of five (5) years. The period to be reviewed will start after the completion of construction and commencement of the operation of the remedial action called for in the RAP to be approved by DTSC for the applicable OU. The review and reevaluation shall be conducted to determine if human health and the environment are being protected by the remedial action. Within thirty (30) calendar days before the end of the time period approved by DTSC to review and reevaluate each remedial action, Respondent shall submit a remedial action review work plan to DTSC for review and approval. Within sixty (60) days of

DTSC's approval of the work plan, Respondent shall implement the work plan and, when implementation has been completed, shall prepare and submit a comprehensive report of the results of the remedial action review. The report shall describe the results of all sample analyses, tests and other data generated or received by Respondent, and evaluate the adequacy of the implemented remedy in protecting public health, safety, and the environment. As a result of any review performed under this section, Respondent may be required to perform additional work or to modify work previously performed to the extent DTSC determines necessary to protect public health, safety and the environment.

5.16 Changes During Implementation of a Final RAP. During the implementation of a final RAP and RD, DTSC may specify such additions, modifications, and revisions to the RD as it deems necessary to protect public health and safety or the environment or to implement the RAP.

5.17 Stop Work Order. In the event that DTSC determines that any activity (whether or not pursued in compliance with this Order) may pose an imminent or substantial endangerment to the health or safety of people on the Site or in the surrounding area or to the environment, DTSC may order Respondent to stop further implementation of this Order for such period of time as is needed to abate the endangerment. In the event that DTSC determines that any site activities (whether or not pursued in compliance with this Order) are proceeding without DTSC authorization, DTSC may order Respondent to stop further implementation of this Order or an activity for such period of time as is needed to obtain DTSC authorization, if such authorization is appropriate. Any deadline in this Order affected by a Stop Work Order, issued under this section, shall be extended for the term of the Stop Work Order.

5.18 Emergency Response Action/Notification. In the event of any action or occurrence on the Site that DTSC or Respondent determines constitutes an emergency (such as a fire, earthquake, explosion, or human exposure to release or threatened release of a hazardous waste, substance, and/or constituent) while this Order is in effect, Respondent shall immediately take all appropriate action to prevent, abate, or minimize such emergency, release, or immediate threat of release and shall immediately notify the DTSC Project Manager. Respondent shall take such action in

consultation with the DTSC Project Manager and in accordance with all applicable provisions of this Order. Within seven (7) days of the onset of such an event, Respondent shall furnish a report to DTSC, signed by Respondent's Project Coordinator, setting forth the events which occurred and the measures taken in response thereto. In the event that Respondent fails to take appropriate response and DTSC takes the action instead, Respondent shall be liable to DTSC for all costs of the response action. Nothing in this section shall be deemed to limit any other notification requirement to which Respondent may be subject.

5.19 Discontinuation of Remedial Technology. Any remedial technology employed in the implementation of a final RAP shall be left in place and operated by Respondent until and except to the extent that DTSC authorizes Respondent in writing to discontinue operation of, move or modify some or all of the remedial technology because Respondent has met the criteria specified in the final RAP for its discontinuance, or because the modifications would better achieve the goals of the final RAP.

5.20 Financial Assurance and Liability Requirements. Within fifteen (15) days of the effective date of the Order, Respondent shall demonstrate to DTSC and maintain financial responsibility for bodily injury and Site damage and financial assurance for closure and post-closure of the remaining HWMU, the former 317 surface impoundment. The financial responsibility for bodily injury and Site damage and financial assurance for the HWMU shall meet the requirements of chapter 15, division 4.5, title 22 of the Cal. Code Regs. Within thirty (30) days of the date DTSC approves a RAP for an OU, Respondent shall demonstrate to DTSC and maintain financial assurance for any operation and maintenance and monitoring required by the RAP. Respondent shall maintain the financial assurance throughout the period of time necessary to complete all required operation and maintenance activities at the OU. The financial assurance mechanisms for operation and maintenance and monitoring shall meet the requirements of Health and Safety Code section 25355.2. All financial responsibility and assurance mechanisms are subject to the review and approval of DTSC.

VI. GENERAL PROVISIONS

6.1 Project Coordinator. Within ten (10) days from the date the Order is signed by DTSC, Respondent shall submit to DTSC in writing the name, address, and telephone number of a Project Coordinator whose responsibilities will be to receive all notices, comments, approvals, and other communications from DTSC. Respondent shall promptly notify DTSC of any change in the identity of the Project Coordinator. Respondent shall obtain approval from DTSC before the new project coordinator performs any work under this Order.

6.2 Project Engineer/Geologist. The work performed pursuant to this Order shall be under the direction and supervision of a qualified professional engineer or a registered geologist in the State of California, with expertise in hazardous waste, substances, and/or constituents site cleanup. Within fifteen (15) days from the date the Order is signed by DTSC, Respondent shall submit: a) The name and address of the project engineer or geologist chosen by Respondent; and b) in order to demonstrate expertise in hazardous waste, substances, and/or constituents cleanup, the résumé of the engineer or geologist, and the statement of qualifications of the consulting firm responsible for the work. Respondent shall promptly notify DTSC of any change in the identity of the Project Engineer/Geologist. Respondent shall obtain approval from DTSC before the new Project Engineer/Geologist performs any work under this Order.

6.2.1 Project Ordnance and Explosive Safety Expert. The OE/UXO work performed pursuant to this Order shall be under the direction and supervision of a qualified professional with expertise in the recognition, detection, handling and disposal methods of OE/UXO. The professional should have an adequate understanding of the Department of Defense Explosives Safety Board Guidelines and be recognized by the United States Corps of Engineers as capable to do the necessary OE/UXO work required under this Order. Within fifteen (15) calendar days of the effective date of this Order, Respondent shall submit: a) The name and address of the Project Ordnance and Explosive Safety Expert chosen by Respondent; and b) in order to demonstrate expertise in UXO/OE cleanup, the résumé of the Ordnance and Explosive Safety Expert, and a statement of qualifications for any consultants that will be responsible for the work. Respondent shall promptly notify DTSC of any change in the identity of the Project Ordnance and Explosive Safety Expert. Respondent shall

obtain approval from DTSC before the new Project Ordnance and Explosive Safety Expert performs any work under this Order.

6.3 Monthly Summary Reports. Within thirty (30) days from the date the Order is signed by DTSC, and on a monthly basis thereafter, Respondent shall submit a Monthly Summary Report of its activities under the provisions of this Order. The report shall be sent to DTSC by the fifteenth (15th) day of each month and shall describe:

(a) Specific actions taken by or on behalf of Respondent during the previous calendar month;

(b) Actions expected to be undertaken during the current calendar month;

(c) All planned activities for the next month;

(d) Any requirements under this Order that were not completed;

(e) Any problems or anticipated problems in complying with this Order; and

(f) All results of sample analyses, tests, and other data generated pursuant to the Order during the previous calendar month, and any significant findings from these data. At Respondent's request or as specified in a particular sampling plan, DTSC may approve an alternative procedure allowing for the submittal of sample analyses, tests, and other data generated pursuant to the Order in periodic technical memoranda.

6.4 Quality Control/Quality Assurance (QC/QA). All sampling and analysis conducted by Respondent under this Order shall be performed in accordance with QC/QA procedures submitted by Respondent and approved by DTSC pursuant to this Order.

6.5 Submittals. All submittals and notifications from Respondent required by this Order shall be sent to:

Ms. Sayareh Amir
Branch Chief
Attention: Project Manager (two copies)
Site Mitigation Branch
Department of Toxic Substances Control
1011 North Grandview Avenue
Glendale, California 91201

6.6 Communications. All approvals and decisions of DTSC made regarding submittals and notifications will be communicated to Respondent in writing by the Site Mitigation Branch Chief, DTSC, or his/her designee. No informal advice, guidance, suggestions or comments by DTSC regarding reports, plans, specifications, schedules or any other writings by Respondent shall be construed to relieve Respondent of the obligation to obtain such formal approvals as may be required.

6.7 DTSC Review and Approval.

(a) All response actions taken pursuant to this Order shall be subject to the approval of DTSC. Respondent shall submit all deliverables required by this Order to DTSC. Once the deliverables are approved by DTSC, they shall be deemed incorporated into, and where applicable, enforceable under this Order.

(b) If DTSC determines that any report, plan, schedule, or other document submitted for approval pursuant to this Order fails to comply with this Order or fails to protect public health or safety or the environment, DTSC may:

(1) Modify the document as deemed necessary and approve the document as modified; or

(2) Return comments to Respondent with recommended changes and a date by which Respondent must submit to DTSC a revised document incorporating the recommended changes.

(c) Any modifications, comments or other directive issued pursuant to (b) above, are incorporated into this Order. Any noncompliance with these modifications or directives shall be deemed a failure or refusal to comply with this Order.

6.8 Compliance with Applicable Laws. Nothing in this Order shall relieve Respondent from compliance with all applicable waste discharge requirements issued by the State Water Resources Control Board or a California Regional Water Quality Control Board. Respondent shall conform all actions required by this Order with all applicable federal, state and local laws and regulations.

6.9 Respondent's Liabilities. Nothing in this Order shall constitute or be construed as a satisfaction or release from liability for any conditions or claims arising as a result of past, current or future operations of Respondent. Nothing in this Order is intended or shall be construed to limit the rights of any of the Parties with respect to claims arising out of or relating to the deposit or disposal at any other location of substances removed from the Site. Nothing in this Order is intended or shall be construed to limit or preclude DTSC from taking any action authorized by law to protect public health or safety or the environment and recovering the cost thereof. Notwithstanding compliance with the terms of this Order, Respondent may be required to take further actions as are necessary to protect public health and the environment.

6.10 Site Access. Access to the Site and laboratories used by Respondent for analyses of samples under this Order shall be provided at all reasonable times to employees, contractors, and consultants of DTSC. Nothing in this section is intended or shall be construed to limit in any way the right of entry or inspection that DTSC or any other agency may otherwise have by operation of any law. DTSC and its authorized representatives shall have the authority to enter and move freely about the Site at all reasonable times for lawful purposes including, but not limited to: inspecting records, operating logs, sampling and analytic data, and contracts relating to this Order; reviewing the progress of Respondent in carrying out the terms of this Order; conducting such tests as DTSC may deem necessary for purposes authorized by law; and verifying the data submitted to DTSC by Respondent.

To the extent a portion of the Site or any other area to which access is required for the implementation of this Order is owned or controlled by persons other than Respondent, Respondent shall use best efforts to secure from such persons access for Respondent, as well as DTSC, its representatives, and contractors, as necessary to effectuate this Order. To the extent that any portion of the Site is controlled by tenants of Respondent, Respondent shall use best efforts to secure from such tenants, access for Respondent, as well as for DTSC, its representatives, and contractors, as necessary to effectuate this Order. For purposes of this Section, "best efforts" includes the payment of reasonable sums of money in consideration of access. If any access required to complete the

Work is not obtained within forty-five (45) days of the effective date of this Order, or within forty-five (45) days of the date DTSC notifies Respondent in writing that additional access beyond that previously secured is necessary, Respondent shall promptly notify DTSC, and shall include in that notification a summary of the steps Respondent has taken to attempt to obtain access. DTSC may, as it deems appropriate, assist Respondent in obtaining access. Respondent shall reimburse DTSC, for any costs incurred by DTSC, in obtaining access, including, but not limited to, attorneys fees and the amount of just compensation.

6.11 Sampling, Data and Document Availability. Respondent shall permit DTSC and its authorized representatives to inspect and copy all sampling, testing, monitoring, or other data generated by Respondent or on Respondent's behalf in order to comply with this Order. Respondent shall submit all such data upon the request of DTSC. Copies shall be provided within seven (7) days of receipt of DTSC's written request. Respondent shall inform DTSC at least seven (7) days in advance of all field sampling under this Order, and shall allow DTSC and its authorized representatives to take duplicates of any samples collected by Respondent pursuant to this Order. Respondent shall maintain a central depository of the data, reports, and other documents prepared pursuant to this Order.

6.12 Record Retention. All such data, reports and other documents shall be preserved by Respondent for a minimum of ten years after the receipt by Respondent of notice of termination and satisfaction with respect to this Order pursuant to Section 6.23, Termination and Satisfaction. If DTSC requests that some or all of these documents be preserved for a longer period of time, Respondent shall either comply with that request or deliver the documents to DTSC, or permit DTSC to copy the documents prior to destruction. Respondent shall notify DTSC in writing, at least six (6) months prior to destroying any documents prepared pursuant to this Order.

6.13 Government Liabilities. The State of California shall not be liable for any injuries or damages to persons or property resulting from acts or omissions by Respondent(s), or related parties specified in Section 6.26, Parties Bound, in carrying out activities pursuant to this Order, nor shall

the State of California be held as party to any contract entered into by Respondent(s) or its agents in carrying out activities pursuant to this Order.

6.14 Additional Actions. By entering into this Order, the Department does not waive the right to take any further actions authorized by law. In the event that DTSC determines, or Respondents propose, that an additional response action not included in an approved work plan submitted pursuant to this Order is necessary to protect public health and safety or the environment, notification of such additional response action shall be provided to the Project Coordinator for the other Party. Unless otherwise stated by DTSC, within thirty (30) days of receipt of the notice from DTSC or Respondent that additional response action is necessary, Respondent shall submit a work plan for the additional response action to DTSC for approval. The work plan shall conform to the requirements of this Order. Respondent shall implement the work plan in accordance with the schedule approved by DTSC. DTSC reserves the right to conduct the additional response action itself at any time, to seek reimbursement from Respondent and to seek any other appropriate relief.

6.15 Extension Requests. If Respondent is unable to perform any activity or submit any document within the time required under this Order, Respondent may, prior to expiration of the time, request an extension of the time in writing. The extension request shall include a justification for the delay. All such requests shall be in advance of the date on which the activity or document is due.

6.16 Extension Approvals. If DTSC determines that good cause exists for an extension, it will grant the request and specify a new schedule in writing. Respondent shall comply with the new schedule which shall be deemed to have been incorporated into this Order.

6.17 Liability for Costs. Respondent is liable for all of DTSC's costs that have been incurred or will be incurred in the future in taking response actions at the Site, including costs of overseeing response actions performed by Respondent pursuant to this Order.

6.18 Payment of Costs. DTSC may bill Respondent for costs incurred in taking response actions at the Site prior to the effective date of this Order. DTSC will bill Respondent quarterly for its response costs incurred after the effective date of this Order. Respondent shall pay DTSC within sixty (60) days of receipt of any DTSC billing. Any billing not paid within sixty (60) days is subject

to interest calculated from the date of the billing pursuant to Health and Safety Code section 25360.1. All payments made by Respondent pursuant to this Order shall be by cashier's or certified check made payable to "DTSC", and shall bear on the face the site code of the Site (300245-00) and the Docket number of the Order. Payments shall be sent to:

Department of Toxic Substances Control
Accounting/Cashier
1001 I Street, 21st Floor
P.O. Box 806
Sacramento, California 95812-0806

A photocopy of all payment checks shall also be sent to the person designated by DTSC to receive submittals under this Order.

6.19 Severability. The requirements of this Order are severable, and Respondent shall comply with each and every other provision hereof, notwithstanding the invalidity of any particular provision.

6.20 Incorporation of Plans, Schedules, and Reports. All plans, schedules, reports, specifications, and other documents that are submitted by Respondent pursuant to this Order are deemed to be incorporated into this Order upon DTSC's approval or modification thereof pursuant to Section 6.7, DTSC Review and Approval, and shall be implemented by Respondent. Any noncompliance with the documents deemed to be incorporated into this Order, shall be deemed a failure or refusal to comply with this Order.

6.21 Modifications. DTSC reserves the right to unilaterally modify this Order. Any modification to this Order shall be effective upon the date the modification is signed by DTSC and shall be deemed incorporated in this Order.

6.22 Time Periods. Unless otherwise specified, time periods begin from the effective date of this Order and "days" means calendar days.

6.23 Termination and Satisfaction. Except for Respondent's obligations under Sections 2.3.1 Hazardous Waste Management Units, 5.14 Operation and Maintenance (O&M), 5.15 Remedy Review, 5.20 Financial Assurance, 6.12 Record Retention, 6.17 Liability for Costs, and 6.18

Payment of Costs, Respondent's obligations under this Order shall terminate and be deemed satisfied upon Respondent's receipt of written notice from DTSC that Respondent has complied with all of the terms of this Order.

6.24 Calendar of Tasks and Schedules. This section is merely for the convenience of listing in one location the submittals required by this Order. If there is a conflict between the date for a scheduled submittal within this section and the date within the section describing the specific requirement, the latter shall govern.

Calendar of Tasks and Schedules

	TASK	SCHEDULE
1.	Identify Project Coordinator; Section 6.1;	Within (10) days from the date the Order is signed by DTSC.
2.	Identify Project Engineer/Geologist; Section 6.2;	Within (15) days from the date the Order is signed by DTSC.
3.	Identify Project Ordnance and Explosive Safety Expert; Section 6.2.1;	Within (15) days from the date the Order is signed by DTSC.
4.	Submit Monthly Summary Reports; Section 6.3;	Within (30) days from the date the Order is signed by DTSC.
5.	Submit groundwater level measurements;	First Monday of specified month
6.	Groundwater sampling results; Section 5.1.5;	Quarterly basis.
7.	Submit RI/FS Workplan; Section 5.2.2;	As required during Site characterization or as requested by DTSC.
8.	Submit Sitewide OE/UXO RI/FS Workplan;	Within (30) days of request from DTSC.
9.	Submit Public Participation Plan; Section 5.8;	Within (40) days from the date the Order is signed by DTSC.
10.	Submit and distribute Fact Sheets;	For projected or completed key milestones, as specified in Public Participation Plan or when requested by DTSC.
11.	Maintain central depository of data, reports, documentation; and	Maintain central depository for a minimum of ten years after conclusion of all activities

		conducted pursuant to the Order.
12.	Provide prior written notice to DTSC before destroying any documents; Section 6.12.	At least six months prior to destroying any documentation prepared pursuant to the Order.
13.	Provide copies of sampling, data, and documentation: Section 6.11;	Within (7) days of receipt of DTSC's request.
14.	Provide prior notice before conducting field sampling;	Inform DTSC (7)days in advance of sampling.
Specific Tasks		
15.	OU 1	
	a.. SubOU 1A, B, and C has received a No Further Action Status from DTSC	No additional remedial investigation requirements unless otherwise determined by DTSC.
	b. OU1 D- complete the remaining portion of the remedial investigation of OU1 D consistent with proposed sampling specified in the letter from RFI/ SCLLC to DTSC dated October 15, 2001.	Within (30) days from the date the Order is signed by DTSC
	c. Prepare a workplan describing the OE clearance and screening for OU1 D.	Within (30) days from the date the Order is signed by DTSC
	d. OU1 E - Finalize the Remedial Investigation and Baseline Risk Assessment Report.	Within (45) days from the date of the Order signed by DTSC
	e. Finalize the Interim Remedial Measure Workplan for OU1 E.	Within (45) days from the date the Order is signed by DTSC.
	f. Submit interim screening and evaluation document; Section 5.3;	As requested by DTSC.
	g. Submit Treatability Studies; Section 5.4;	Within (60) days from the date the Order Workplan is approved by DTSC
	h. Submit RI Report; Section 5.5;	Per approved RI/FS Workplan Schedule.
	i. Submit Baseline Risk Assessment; Section 5.6;	Within (30) days from submittal of RI Report.

j.	Submit FS Report; Section 5.7;	Within (60) days from submittal of RI Report.
k.	Submit Draft RAP; Section 5.10;	Within (30) days after approval of all FS Reports for OU 1.
l.	Submit Responsiveness Summary;	Within (10) days of closure of public comment period.
m.	Submit Final RAP.	Within (15) days of receipt of DTSC's comments.
n	Submit Remedial Design; Section 5.11;	Within (60) days after DTSC's approval of the Final RAP.
o.	Submit Implementation Report; Section 5.13;	Within (30) days of completion of field activities.
p.	Deed Restrictions; Section 5.12;	Within (90) days of approval of Final RAP.
r.	Submit O&M Workplan Section 5.14;	Within (30) days of DTSC's request.
s.	Submit Remedial Action Review Workplan; Section 5.15;	Within (30) days before end of five-year review period.
t.	Implement the Remedial Action Review Workplan;	Within (60) days of DTSC's approval of the workplan.
u.	Submit Emergency Response Action Report; Section 5.18;	Within (7) days of an emergency response action.
v.	Provide copies of sampling, data, and documentation; Section 6.11;	Within (7) days of receipt of DTSC's request.
w.	Provide prior notice before conducting field sampling;	Inform DTSC (7) days in advance of sampling.
x.	Maintain central depository of data, reports, documentation; and	Maintain central depository for a minimum of ten years after conclusion of all activities conducted pursuant to the Order
y.	Provide prior written notice to the DTSC before destroying any documentation prepared pursuant to the Order; Section 6.12.	At least six months prior to destroying any documents.

16. OU2		
a.	Begin the remedial investigation field work as specified in the DTSC approved Final Remedial Investigation Work Plan For Operable Unit 2 and 6 dated August 2000, prepared by Morrison Knudsen.	Within (60) days from the date the Order is signed by DTSC.
b.	Submit interim screening and evaluation document; Section 5.3;	As requested by DTSC.
c.	Submit Treatability Studies; Section 5.4;	Within (60) days from the date the Workplan is approved by DTSC
d.	Submit RI Report; Section 5.5;	Per approved RI/FS Workplan Schedule.
e.	Submit Baseline Risk Assessment; Section 5.6;	Within (30) days from submittal of RI Report.
f.	Submit FS Report; Section 5.7;	Within (60) days from submittal of RI Report.
g.	Submit Draft RAP; Section 5.10;	Within (30) days after approval of FS Report.
h.	Submit Responsiveness Summary;	Within (10) days of closure of public comment period.
i.	Submit Final RAP;	Within (15) days of receipt of DTSC's comments.
j.	Submit Remedial Design; Section 5.11;	Within (60) days after DTSC's approval of the Final RAP.
k.	Submit Implementation Report; Section 5.13;	Within (30) days of completion of field activities.
l.	Deed Restrictions; Section 5.12;	Within (90) days of approval of Final RAP.
m.	Submit O&M Workplan Section 5.14;	Within (30) days of DTSC's request.
n.	Submit Remedial Action Review Workplan; Section 5.15;	Within (30) days before end of five-year review period.

o.	Implement the Remedial Action Review Workplan;	Within (60) days of DTSC's approval of the workplan.
p.	Submit Emergency Response Action Report; Section 5.18;	Within (7) days of an emergency response action.

17. OU3

a.	Provide the Remedial Investigation Workplan for OU3, including requirements established by the Department of Health Service Radiologic Health Branch.	Within (90) days from the date the Order is signed with DTSC.
b.	Submit interim screening and evaluation document; Section 5.3;	As requested by DTSC.
c.	Submit Treatability Studies; Section 5.4;	Within (60) days from the date the Order Workplan is approved by DTSC
d.	Submit RI Report; Section 5.5;	Per approved RI/FS Workplan Schedule.
e.	Submit Baseline Risk Assessment; Section 5.6;	Within (30) days from submittal of RI Report.
f.	Submit FS Report; Section 5.7;	Within (60) days from submittal of RI Report.
g.	Submit Draft RAP; Section 5.10;	Within (30) days after approval of FS Report.
h.	Submit Responsiveness Summary;	Within (10) days of closure of public comment period.
i.	Submit Final RAP;	Within (15) days of receipt of DTSC's comments
j.	Submit Remedial Design; Section 5.11;	Within (60) days after DTSC's approval of the Final RAP.
k.	Submit Implementation Report; Section 5.13;	Within (30) days of completion of field activities.
l.	Deed Restrictions; Section 5.12;	Within (90) days of approval of Final RAP.
m.	Submit O&M Workplan	Within (30) days of DTSC's request.

		Section 5.14;	
	n.	Submit Remedial Action Review Workplan; Section 5.15;	Within (30) days before end of five-year review period.
	o.	Implement the Remedial Action Review Workplan;	Within (60) days of DTSC's approval of the workplan.
	p.	Submit Emergency Response Action Report; Section 5.18;	Within (7) days of an emergency response action.
18.	OU4		
	a.	Provide Remedial Investigation Workplan for OU4, unless otherwise required by DTSC;	Within (270) days from the date the Order is signed by DTSC
	b.	Submit interim screening and evaluation document; Section 5.3;	As requested by DTSC.
	c.	Submit Treatability Studies; Section 5.4;	Within (60) days from the date the Workplan is approved by DTSC
	d.	Submit RI Report; Section 5.5;	Per approved RI/FS Workplan Schedule.
	e.	Submit Baseline Risk Assessment; Section 5.6;	Within (30) days from submittal of RI Report.
	f.	Submit FS Report; Section 5.7;	Within (60) days from submittal of RI Report.
	g.	Submit Draft RAP; Section 5.10;	Within (30) days after approval of FS Report.
	h.	Submit Responsiveness Summary;	Within (10) days of closure of public comment period.
	i.	Submit Final RAP; comments	Within (15) days of receipt of DTSC's
	j.	Submit Remedial Design; Section 5.11;	Within (60) days after DTSC's approval of the Final RAP.
	k.	Submit Implementation Report; Section 5.13;	Within (30) days of completion of field activities.
	l.	Deed Restrictions; Section 5.12;	Within (90) days of approval of Final RAP.
	m.	Submit O&M Workplan	Within (30) days of DTSC's request.

	Section 5.14;	
n.	Submit Remedial Action Review Workplan; Section 5.15;	Within (30) days before end of five-year review period.
o.	Implement the Remedial Action Review Workplan;	Within (60) days of DTSC's approval of the workplan.
p.	Submit Emergency Response Action Report; Section 5.18;	Within (7) days of an emergency response action.
19. OU5		
a.	Provide Remedial Investigation Workplan for OU 5, unless otherwise required by DTSC.	Within (180) days from the date the Order is signed by DTSC
b.	Submit interim screening and evaluation document; Section 5.3;	As requested by DTSC.
c.	Submit Treatability Studies; Section 5.4;	Within (60) days from the date the Workplan is approved by DTSC
d.	Submit RI Report; Section 5.5;	Per approved RI/FS Workplan Schedule.
e.	Submit Baseline Risk Assessment; Section 5.6;	Within (30) days from submittal of RI Report.
f.	Submit FS Report; Section 5.7;	Within (60) days from submittal of RI Report.
g.	Submit Draft RAP; Section 5.10;	Within (30) days after approval of FS Report.
h.	Submit Responsiveness Summary;	Within (10) days of closure of public comment period.
i.	Submit Final RAP;	Within (15) days of receipt of DTSC's comments
j.	Submit Remedial Design; Section 5.11;	Within (60) days after DTSC's approval of the Final RAP.
k.	Submit Implementation Report; Section 5.13;	Within (30) days of completion of field activities.
l.	Deed Restrictions; Section 5.12;	Within (90) days of approval of Final RAP.

m.	Submit O&M Workplan Section 5.14;	Within (30) days of DTSC's request.
n.	Submit Remedial Action Review Workplan; Section 5.15;	Within (30) days before end of five-year review period.
o.	Implement the Remedial Action Review Workplan;	Within (60) days of DTSC's approval of the workplan.
p.	Submit Emergency Response Action Report; Section 5.18;	Within (7) days of an emergency response action.
20. OU6		
a.	OU6 is scheduled to be investigated concurrent with the OU 2 Workplan Schedule	Within (60) days from the date the Order is signed by DTSC.
b.	Submit interim screening and evaluation document; Section 5.3;	As requested by DTSC.
c.	Submit Treatability Studies; Section 5.4;	Within (60) days from the date the Workplan is signed by DTSC
d.	Submit RI Report; Section 5.5;	Per approved RI/FS Workplan Schedule.
e.	Submit Baseline Risk Assessment; Section5.6;	Within (30) days from submittal of RI Report.
f.	Submit FS Report; Section 5.7;	Within (60) days from submittal of RI Report.
g.	Submit Draft RAP; Section 5.10;	Within (30) days after approval of FS Report.
h.	Submit Responsiveness Summary;	Within (10) days of closure of public comment period.
i.	Submit Final Rap; comments	Within (15) days of receipt of DTSC's comments.
j.	Submit Remedial Design; Section 5.11;	Within (60) days after DTSC's approval of the Final RAP.
k.	Submit Implementation Report; Section 5.13;	Within (30) days of completion of field activities.
l.	Deed Restrictions; Section 5.12;	Within (90) days of approval of Final RAP.

m.	Submit O&M Workplan Section 5.14;	Within (30) days of DTSC's request.
n.	Submit Remedial Action Review Workplan; Section 5.15;	Within (30) days before end of five-year review period.
o.	Implement the Remedial Action Review Workplan;	Within (60) days of DTSC's approval of the workplan.
p.	Submit Emergency Response Action Report; Section 5.18;	Within (7) days of an emergency response action.
q.	Complete all corrective actions for area 317 per comprehensive Groundwater Monitoring Evaluation dated June 28, 2002, Exhibit 7 to the Order; Section 6.12.	Within (90) days from the date the Order is signed by DTSC

21. OU7

a.	Provide the Remedial Investigation Workplan for OU 7 that characterizes the site groundwater in coordination with ongoing effort being conducted with US Army Corps of Engineers for the Eastern Santa Clara River Basin Groundwater Study.	Within (45) days from the date the Order is signed by DTSC.
b.	Submit interim screening and evaluation document; Section 5.3;	As requested by DTSC.
c	Submit Treatability Studies; Section 5.4;	Within (60) days from the date the Workplan is signed by DTSC
d	Submit RI Report; Section 5.5;	Per approved RI/FS Workplan Schedule.
e.	Submit Baseline Risk Assessment; Section5.6;	Within (30) days from submittal of RI Report.
f.	Submit FS Report; Section 5.7;	Within (60) days from submittal of RI Report.
g	Submit Draft RAP; Section 5.10;	Within (30) days after approval of FS Report.

h.	Submit Responsiveness Summary;	Within (10) days of closure of public comment period.
i.	Submit Final Rap;	Within (15) days of receipt of DTSC's comments.
j.	Submit Remedial Design; Section 5.11;	Within (60) days after DTSC's approval of the Final RAP.
k.	Submit Implementation Report; Section 5.13;	Within (30) days of completion of field activities.
l.	Deed Restrictions; Section 5.12;	Within (90) days of Final RAP approval.
m.	Submit O&M Workplan Section 5.14;	Within (30) days of DTSC's request.
n.	Submit Remedial Action Review Workplan; Section 5.15;	Within (30) days before end of five-year review period.
o.	Implement the Remedial Action Review Workplan;	Within (60) days of DTSC's approval of the workplan.
p.	Submit Emergency Response Action Report; Section 5.18;	Within (7) days of an emergency response action.

6.25 Parties Bound. This Order applies to and is binding upon Respondent, and its officers, directors, agents, employees, contractors, consultants, receivers, trustees, successors and assignees, including but not limited to, individuals, partners, and subsidiary and parent corporations. Respondent shall provide a copy of this Order to all contractors, subcontractors, laboratories, and consultants which are retained to conduct any work performed under this Order, within fifteen (15) days after the effective date of this Order or the date of retaining their services, whichever is later. Respondent shall condition any such contracts upon satisfactory compliance with this Order. Notwithstanding the terms of any contract, Respondent is responsible for compliance with this Order and for ensuring that its subsidiaries, employees, contractors, consultants, subcontractors, agents and attorneys comply with this Order.

6.26 Change in Ownership. Respondent shall comply with Title 22, Cal.Code Regs. section 66270.72. No change in ownership of the Site or corporate or partnership status relating to the entity that owns the Site shall in any way alter Respondent's responsibility under this Order without DTSC's written approval. No conveyance of title, easement, or other interest in the Site, or a portion of the Site, shall affect Respondent's obligations under this Order. Unless DTSC agrees in writing that such obligations may be transferred to a third party, Respondent shall be responsible for and liable for any failure to carry out all activities required of Respondent by the terms and conditions of this Order, regardless of Respondent's use of employees, agents, contractors, or consultants to perform any such tasks. Respondent shall provide a copy of this Order to any subsequent owner or successor before ownership rights or the Site are transferred to such owner or successor.

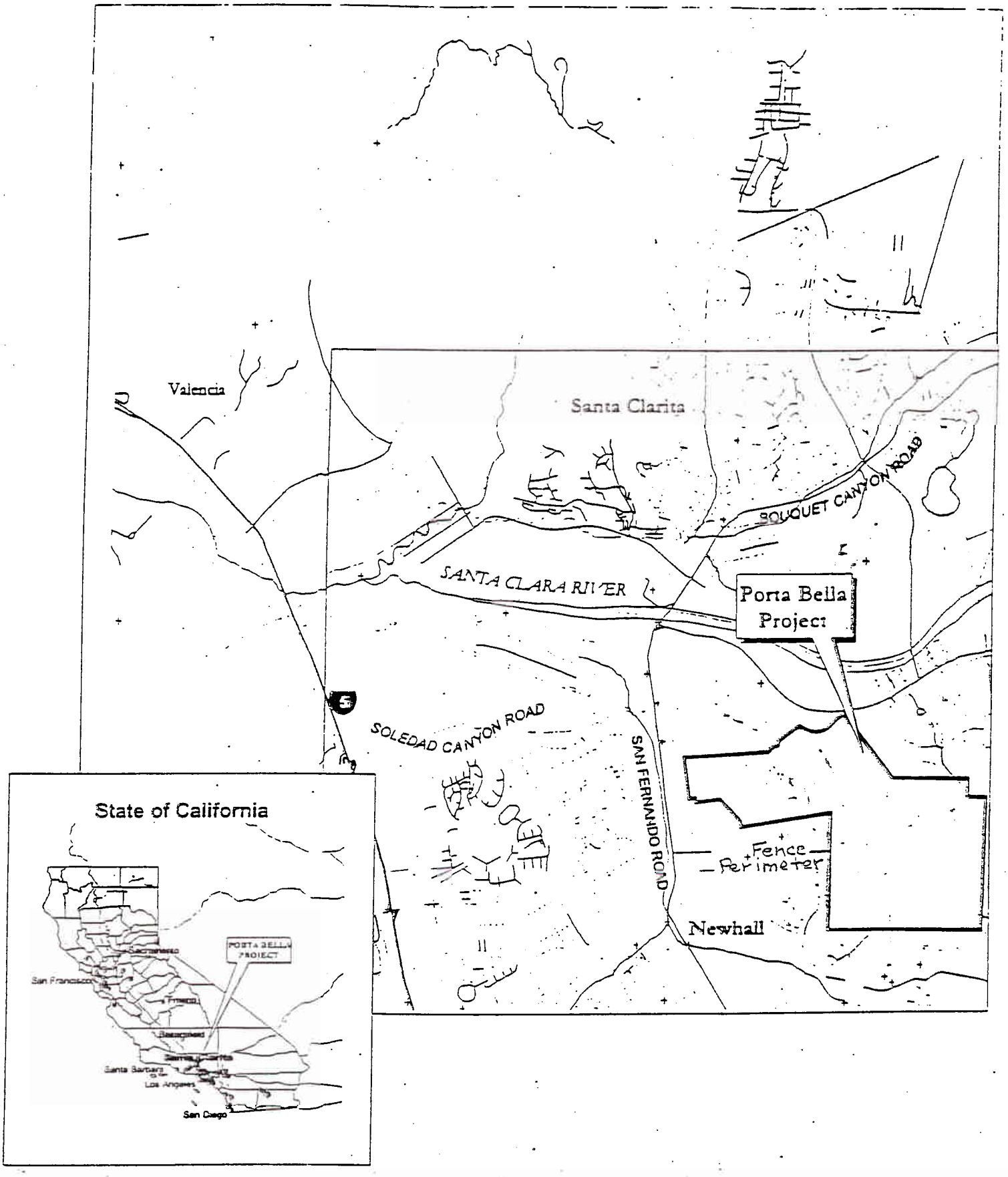
VII. NOTICE OF INTENT TO COMPLY

7. Not later than fifteen (15) days after the effective date of this Order, Respondent shall provide written notice, in accordance with paragraph 6.5 Submittals of this Order, stating whether or not Respondent will comply with the terms of this Order. If Respondent, or any one of them, do not unequivocally commit to perform all of the requirements of this Order, they, or each so refusing, shall be deemed to have violated this Order and to have failed or refused to comply with this Order. Respondent's (s') written notice shall describe, using facts that exist on or prior to the effective date of this Order, any "sufficient cause" defenses asserted by Respondent under Health and Safety Code sections 25358.3(a) and 25355.5(a)(1)(B) or CERCLA section 107(c)(3), 42 U.S.C. section 9607(c)(3).

VIII. EFFECTIVE DATE

8.1 This Order is final and effective five days from the date of mailing, which is the date of the cover letter transmitting the Order to you.

EXHIBIT 1



N

2000 0 2000 4000 Feet

Scale of Main Site Map: 1:55,000

SANTA CLARITA, L.L.C.
PORTA BELLA PROJECT
OU1E WORK PLAN
FIG. 1
SITE LOCATION MAP

Knight Piésold and Co.
CONSULTING ENGINEERS AND ENVIRONMENTAL SCIENTISTS

February 18, 2000

ArcView File 1581g111.apr

EXHIBIT 2

Exhibit 2

HISTORY OF FACILITY OWNERSHIP

Owners	Year Transferred
Parcel #1	
1st Newhall Land & Farming Co. 2nd Los Angeles Home Co.	1912
1st Newhall Land & Farming Co. 2nd Frank Neel	1924
1st Bank of America 2nd William G. and Mary Bonelli	1939
1st Frank M. and Annie I. Neel 2nd Bermite Powder Co.	1942
1st Erle P. Halliburton, Inc. 2nd Bermite Powder Co.	1942
1st Halifax Explosives Co. 2nd Neal M. Giannini	1942
1st Frank M. and Annie I. Neel 2nd Bermite Powder Co.	1943
1st Halifax Explosives Co. 2nd Bermite Powder Co.	1943
1st Bermite Powder Co. 2nd Whittaker Corporation	1967
Parcel #2	
1st Newhall Land & Farming Co. 2nd Los Angeles Home Co.	1912
1st Newhall Land & Farming Co. 2nd Frank Neel	1924
1st Los Angeles Powder Co. 2nd J. H. Jeffries	1934
1st Bank of America 2nd Halifax Explosives Co.	1936
1st J. H. Jeffries 2nd Bermite Powder Co.	1942

Exhibit 2 (continued)

HISTORY OF FACILITY OWNERSHIP

	Owners	Year Transferred
1st	Jack L. Arnold	1942
2nd	Bermite Powder Co.	
1st	Allen R. Mitchell	1947
2nd	Julius R. Schwartz	
1st	Los Angeles Home co.	1949
2nd	Bermite Powder Co.	
1st	Los Angeles Home Co.	1949
2nd	Domenico and Mary Ghiggia	
1st	Domenico and Mary Ghiggia	1949
2nd	Lester Roberts, et al	
1st	J. H. Jeffries	1950
2nd	Bermite Powder Co.	
1st	Domenico and Mary Ghiggia	1951
2nd	Julius R. Schwartz	
1st	Julius R. and Anna R. Schwartz	1951
2nd.	Bermite Powder Co.	
1st	Domenico and Mary Ghiggia	1955
2nd	Bermite Powder co.	
1st	Bermite Powder Co.	1967
2nd	Whittaker Corporation	
Parcel #3		
1st	Newhall Land & Farming Co.	1912
2nd	Los Angeles Home Co.	
1st	Newhall Land & Farming Co.	1924
2nd	Frank Neel	
1st	Los Angeles Powder Co.	1934
2nd	J. H. Jeffries	
1st	Los Angeles Home Co.	1949
2nd	Bermite Powder Co.	
1st	Bermite Powder Co.	1967

HISTORY OF ON-SITE MANUFACTURING

Owner	Years	Representative Products
L. A. Powder Company	1934-1936	Dynamite
E. P. Halliburton, Inc.	1942	Oil field explosives
Halifax Explosives Company	1936-1942	Fireworks
Bermite Powder Company	1942-1967	PhotoFlash (flares, bombs, explosives)
Whittaker Corporation	1967-Present	Igniters, gas generators, Jato rockets, flares, practice bombs, Sidewinders, spin rockets

EXHIBIT 3

TABLE 1
CHEMICAL AND WASTE SUMMARY BY PRODUCT CATEGORY
Whittaker Bermite Facility

PRODUCT CATEGORY: Ammunition Rounds

PRODUCT NAMES:	CHEMICAL NAME	WASTE / BY-PRODUCT
20, 30mm cartridge	PBXN-5	Contaminated Paper
	RDX	Contaminated Tools
	aluminum	Expended Test Items
	aluminum oxide	Neutralized Salts
	boron	Neutralizing Solution
	calcium resinate	Powders
	epoxy polyamide	Reject Units
	epoxy varnish	Solvents
	graphite	Thinner
	lacquer (incl. black, clear)	
	lacquer thinner	
	methylene chloride	
	nitro cellulose	
	paint (primer + enamel)	
	polyvinyl acetate	
	potassium nitrate	
	potassium perchlorate	
	smokeless powder	
	thread locking compound	

PRODUCT CATEGORY: Detonators, Fuzes, and Boosters

PRODUCT NAMES:	CHEMICAL NAME	WASTE / BY-PRODUCT
HM-6 Initiating charge, M57A1	HMX	Contaminated Paper
Detonator, M505A3 Fuze, MK 43	PETN	Contaminated Tools
	RDX	Expended Test Items
	acetone	Neutralized Salts
	antimony sulfide	Neutralizing Solution
	barium chromate	Powders
	barium nitrate	Reject Units
	boron	Solvents
	boron chromate	Thinner
	butyl acetate (n)	Wash Water
	calcium chromate	
	calcium resinate	
	ceric ammonium nitrate	
	ferric oxide	
	graphite	
	hydrochloric acid	
	lacquer (incl. black, clear)	
	lacquer thinner	
	lead azide	
	lead carbonate	
	lead dioxide	
	lead styphnate	
	lead styphnate, basic	
	potassium nitrate	
	sodium chloride	
	sodium hydroxide	
	tetracene	
	xylene substitute solvent	

TABLE 1
CHEMICAL AND WASTE SUMMARY BY PRODUCT CATEGORY
Whittaker Bermite Facility

PRODUCT CATEGORY: Detonators, Fuzes, and Boosters

CHEMICAL NAME
zirconium

PRODUCT CATEGORY: Flares and Signal Cartridges

PRODUCT NAMES:	CHEMICAL NAME	WASTE / BY-PRODUCT
MK 24 mod 4, MK 4 Signal Cartridge, W-9 and W-17 Sidewinder Practice Signals	Hycar Laminal 4116 Viton A acetone aluminum sulfate barium chromate black powder boron butyl acetate (n) cobalt naphthenate copper sulfate ferrous sulfate hexane lead carbonate lead dioxide lead, red magnesium methyl ethyl ketone nitro cellulose paint (primer + enamel) phosphorus, red stabilized polytetrafluoroethylene potassium perchlorate shotgun primer smokeless powder sodium bicarbonate sodium sulfate sulfuric acid titanium dioxide titanium tetrachloride varnish	Acetone Aluminum Sulfate Application Tubes Butyl Acetate Cobalt Sulfate Contaminated Paper Contaminated Tools Expended Test Items Ferrous Sulfate Hydrochloric Acid Pellets Powders Red Phosphorous Reject Units Smokeless Powder Sodium Sulfate Solids Solvents Titanium Dioxide Varnish Wash Water

PRODUCT CATEGORY: Glow Plugs, Tracer and Pyrophoric Pellets

PRODUCT NAMES:	CHEMICAL NAME	WASTE / BY-PRODUCT
23mm Tracer Pellet, HEI-T-TP, MTV Type I, II and III, APD-S, M221	RDX Viton A acetone aluminum aluminum oxide barium chromate black powder boron calcium resinate	Contaminated Paper Contaminated Tools Expended Test Items Pellets Powder Wash Water Powders Reject Units Solvents

TABLE 1
CHEMICAL AND WASTE SUMMARY BY PRODUCT CATEGORY
Whittaker Bermite Facility

PRODUCT CATEGORY: Glow Plugs, Tracer and Pyrophoric Pellets

CHEMICAL NAME
carbon black
ethyl alcohol
ethyl cellulose
graphite
hexane
isopropyl alcohol
magnesium
polytetrafluoroethylene
potassium perchlorate
strontium nitrate
strontium peroxide
tetrachloroethylene
trichloroethane (1,1,1-)
trichloroethylene
vegetable oil

PRODUCT CATEGORY: Igniters, Ignition Compositions, and Explosive Bolts

PRODUCT NAMES:	CHEMICAL NAME	WASTE / BY-PRODUCT
BP-1, MK 192 Igniter, IB-52 Ignition Composition, MK 125 Igniter, MK 1 mod 1 Squib, MK 37 Torpedo Igniter	Laminal 4116	Contaminated Paper
	acetone	Expended Test Items
	barium chromate	Lacquer
	benzene	Methylene Chloride
	black powder	Pellets
	boron	Powders
	calcium resinate	Rags
	calcium stearate	Solvents
	diazodinitrophenol	Thinner
	dibutyl phthalate	
	diphenyl amine	
	epoxy polyamide	
	ethyl alcohol	
	ethyl cellulose	
	graphite	
	lacquer (incl. black, clear)	
	lacquer thinner	
	lead chromate	
	magnesium	
	manganese	
	methylene chloride	
	nitro cellulose	
	nitrostarch	
	pluronic flake	
	polyvinyl acetate	
	potassium chlorate	
	potassium nitrate	
	potassium perchlorate	
	smokeless powder	
	titanium	
	tricresyl phosphate	
	tungsten	

TABLE 1
CHEMICAL AND WASTE SUMMARY BY PRODUCT CATEGORY
Whittaker Bermite Facility

PRODUCT CATEGORY: Igniters, Ignition Compositions, and Explosive Bolts

CHEMICAL NAME
vinyl acetate/vinyl chloride copolymer

PRODUCT CATEGORY: Power Charges

PRODUCT NAMES:	CHEMICAL NAME	WASTE / BY-PRODUCT
Baker #420, Baker Oil Tool	asphalt carbon black dimer acid diisocyanate dioctyl adipate hydroxyl-terminated polybutadiene isophorone diisocyanate kerosene oxamide potassium perchlorate strontium nitrate sulfur tetrachloroethylene trichloroethane (1,1,1-) trichloroethylene	Bulk Bakalets Bulk Solids Contaminated Paper Contaminated Tools Expended Test Items Filled Tubes Powders Solvents

PRODUCT CATEGORY: Rocket Motors and Gas Generators

PRODUCT NAMES:	CHEMICAL NAME	WASTE / BY-PRODUCT
Sidewinder, Chaparrel, JATO, Spin Motor MC3003, Yardney	PAPI PETN TMAP TMP VYLF binder XYHL copolymer Zytel-61 acetone aliphatic polyurethane aluminum aluminum oxide ammonium dichromate ammonium perchlorate antimony sulfide barium chromate barium nitrate benzene boron butyl acetate (n) butylcarbitol formal butylcatechol (tertiary) carbon black carboxyl-terminated polybutadiene ceric ammonium nitrate chromium octoate cobalt naphthenate	Ammonium Perchlorate Water Mixed Pyrotechnics Neutralized Salts Paint Propellent Contaminated Paper Propellent Contaminated Tools Resins Sand Seal Rite Containers Solvents Stripper

TABLE 1
CHEMICAL AND WASTE SUMMARY BY PRODUCT CATEGORY
Whittaker Sermita Facility

PRODUCT CATEGORY: Rocket Motors and Gas Generators

CHEMICAL NAME
copper chromate
copper chromite
cumene hydroperoxide
diarylanilide yellow
diatomaceous earth
dioctyl adipate
diphenyl guanidine
epoxy resin
ethyl cellulose
ferric oxide
graphite
grease
hydrochloric acid
hydroxyl-terminated polybutadiene
isophorone diisocyanate
isopropyl alcohol
lead azide
lead carbonate
lead dioxide
lead styphnate
lead styphnate, basic
lead thiocyanate
lecithin
lupersol
magnesium
magnesium oxide
methanol
methyl aziridinyl phosphoric oxide
methyl ethyl ketone
nitric acid
nitro guanidine
oxamide
paint (primer + enamel)
polybutadiene butarez
polyester resin
polysulfide monomer
polytetrafluoroethylene
potassium nitrate
potassium perchlorate
quinone dioxime (para -)
silica
sodium chloride
sodium hydroxide
strontium nitrate
styrene monomer
sulfur
sylmar resin
tetracene
tetrachloroethylene
tetranitrocarbazole
thread locking compound
trichloroethane (1,1,1-)
trichloroethylene

TABLE 1
CHEMICAL AND WASTE SUMMARY BY PRODUCT CATEGORY
Whittaker Bermite Facility

PRODUCT CATEGORY: Rocket Motors and Gas Generators

CHEMICAL NAME
trisodium phosphate
tungsten
varnish
zinc chromate
zirconium
zirconium carbide

PRODUCT CATEGORY: Unspecified/Unknown

PRODUCT NAMES:	CHEMICAL NAME	WASTE / BY-PRODUCT
	acrylonitrile	
	barium dioxide	
	calcium silicide	
	copper (powder)	
	ferric chloride	
	ferrous sulfide	
	iron carbonyl (powder)	
	nitronaphthalene (1-)	
	polybutadiene (cis-)	
	potassium chloride	
	sodium citrate	
	sodium stearate	
	tetraethylenepentamine	
	tetryl	
	toluidine	
	trinitrotoluene	
	triphenyl	
	zinc stearate	

PRODUCT CATEGORY: Missile Main Charges

PRODUCT NAMES:	CHEMICAL NAME	WASTE / BY-PRODUCT
Sidewinder and Chaparral Missile Main Charges	PBXN-3	Contaminated Paper
	RDX	Contaminated Tools
	aluminum	Neutralizing Solution
	aluminum oxide	Powders
	barium nitrate	Reject Units
	bituminous solvent	Thinner
	calcium stearate	
	lacquer (incl. black, clear)	
	lacquer thinner	
	paint (primer + enamel)	
	paraffin	

EXHIBIT 4

EXHIBIT 4

EXHIBIT 4
LIST OF POTENTIAL SWMU's

1. Former Building 317, 317 Impoundment, Drum Rinse Area & Ravine Above 317
2. Area Below Water Tank #2
3. Pond Flat
4. 339 Area
5. Reject Ridge
6. Ravine Near 342 Area
7. Former Building 308
8. Former Building/Magazine 14 Sump
9. Former Building 110 Sump
10. Old Lead Azide Area
11. Area Near Former Building P-28
12. Pipe Outside Former Building.195
13. New Lead Azide Area
14. Burn Valley
15. Chemical Recovery Facility
16. Hula Bowl Canyons 1-9
17. East Fork Landfill
18. Area Near Former Building 73 (Garage)
19. Sandblast Residue Site
20. Former Building 211

21. Former Building 219, Including Rinse Water Tank
22. Former Building 340/BP - 1 Sump
23. Former Industrial Clarifier
24. Former Building 202
25. Former Building 314
26. Hog-Out Area
27. Former Building 373
28. Area Near Former Buildings 376 & 377 (Shock Gel Area)
29. Former Building 234
30. Former Building 371
31. Area Near Former Buildings 36 & 42
32. Ravine Below Lower Magazine Road
33. Area Near Former Buildings 46, 48, 49, 50 & 60
34. Area Near Former Building 313
35. Former Building 127 Sump
36. MTV Area
37. The Point
38. Former Building 6
39. Aboveground Fuel Tank
40. Underground Diesel Tank
41. Former Building 88 Sump
42. Area Near Former Building 228
43. Area Near Former Building 324

44. Area Near Former Building 334
45. Area Near Former Building 37
46. Area Near Former Buildings 59 & 60
47. Area Near Former Building 74
48. Area Near Former Building 99
49. Area Near Former Building 101
50. Area Near Former Building 217
51. Area Near Former Building 225
52. Area Near Former Building 226
53. Area Near Former Building 306
54. Area Near Former Building 307
55. Area Near Former Building 327
56. Area Near Former Building 337
57. Test Range
58. Old Flare Production Area
59. Area/Drainfield Near Former Building 223
60. Area Behind Cafeteria
61. Former Building 41/Lower Lab
62. Old Dynamite Building
63. Building 59 Sump
64. Building 347 Tank
65. Flare Tunnel/Flare Test Structure
66. Orofino Canyon

67. Building 33 (Drum Storage)

68. Building 45 Septic System

69. Pacific Soils Borings: B-6

70. B-20

71. B-43

72. B-45,46

73. B-49

74. B-75

75. B-51

76. Abandoned Highway Well

77. Ravine Below Former Building 236

EXHIBIT 5

EXHIBIT 5

EXHIBIT 5

STANDARD FENCE SPECIFICATIONS

The fence shall be a standard chain link fence with a height of six feet. The wiring of the fencing shall be 11 gauge and woven into an approximately two-inch mesh. The fencing should have a knuckled finish on the top and bottom edges. The posts are to be made of galvanized metal, and shall be spaced no more than ten feet apart. Any access gates are to be of the same material as the fence, and shall be secured with a padlock.

SIGN SPECIFICATIONS

The following are specifications for warning signs which must be posted in accordance with a Fence and Post Order:

1. All lettering shall be legible from a distance of 25 feet.

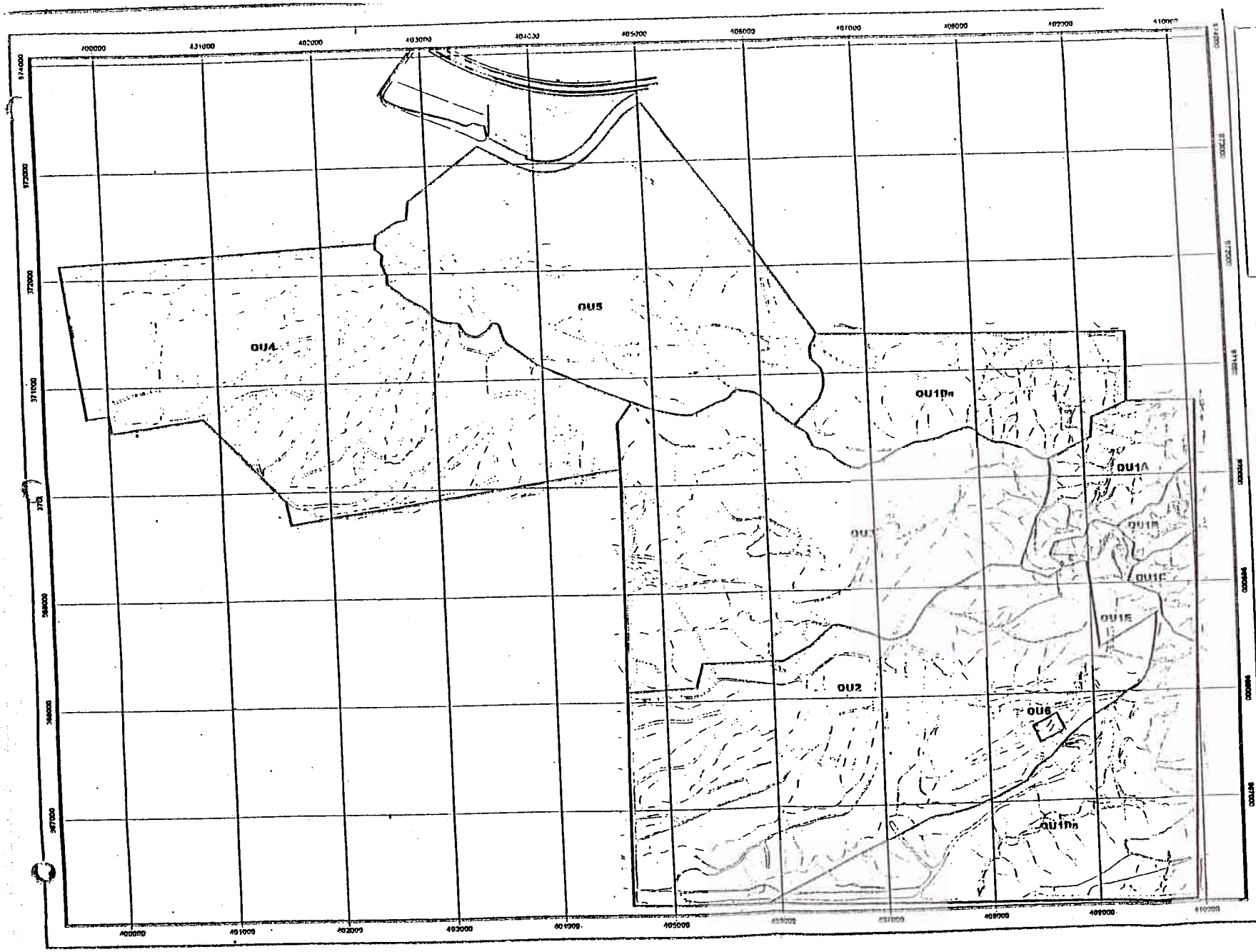
2. The signs shall read: " Caution: Hazardous Substance Area; Unauthorized Persons Keep Out," and shall provide the name and phone number for the nearest DTSC Regional Office.

3. The signs shall also provide the warning in number 2 above in a second language which is appropriate to the local area. In addition, the sign shall have the international "Do Not Enter" symbol.

4. The signs shall be visible from the surrounding area and posted, at a minimum, at intervals of every 200 feet arount the perimeter of the fence, and at every actual or likely point of entry.

EXHIBIT 6

EXHIBIT 6



LEGEND

Roads

- Asphalt
- Dirt
- Divided

10-foot contours

Intermittent Drainages

Operable Units

SOURCES:

Sample locations surveyed by Fresco & Associates, Inc.

Aerial photogrammetry provided by W. A. Rose and Associates, Oct. 1999.

Operable Unit boundaries defined in letter dated 3/30/99 from Santa Clarita, L.L.C., to California Dept. of Toxic Substances Control, "Revised Operable Unit Program and Project Schedule Proposal Former Whittaker Bermite Site - Porta Bella Development Project, 22118 West Soledad Canyon Road, Santa Clarita, California." Edited by Knight Piésold and Co., December, 1999.

OU1E boundary approved by DTSC, January 7, 2000.

N

500 0 500 Feet

Scale 1:10,000

California State Plane coordinates, Zone 5, NAD 83 datum.

SANTA CLARITA, L.L.C.
PORTA BELLA PROJECT
OU1E WORK PLAN
FIG. 2
LOCATION OF OPERABLE UNITS

Knight Piésold and C

CONSULTING ENGINEERS AND ENVIRONMENTAL SCIENTI

February 25, 2000

ArcView Doc 1691g1